carahsoft

CARAHSOFT'S RESPONSE TO THE

State of Nebraska

REQUEST FOR PROPOSAL

Mass Notification Service (MNS)

SOLICITATION NO. 6214 Z1

TECHNICAL PROPOSAL
ORIGINAL COPY

Friday
February 7, 2020

SOLUTION PROVIDED BY

BlackBerry

CARAHSOFT TECHNOLOGY CORP.
11493 SUNSET HILLS ROAD, SUITE 100
RESTON, VA 20190

888.66.CARAH | WWW.CARAHSOFT.COM

REQUEST FOR PROPOSAL FOR CONTRACTUAL SERVICES FORM

BIDDER MUST COMPLETE THE FOLLOWING

By signing this Request for Proposal for Contractual Services form, the bidder guarantees compliance with the procedures stated in this RFP, and agrees to the terms and conditions unless otherwise indicated in writing and certifies that bidder maintains a drug free work place.

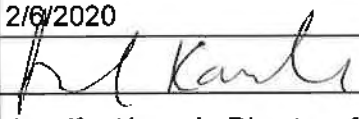
Per Nebraska's Transparency in Government Procurement Act, Neb. Rev Stat § 73-603 DAS is required to collect statistical information regarding the number of contracts awarded to Nebraska Contractors. This information is for statistical purposes only and will not be considered for contract award purposes.

_____ NEBRASKA CONTRACTOR AFFIDAVIT: Bidder hereby attests that bidder is a Nebraska Contractor. "Nebraska Contractor" shall mean any bidder who has maintained a bona fide place of business and at least one employee within this state for at least the six (6) months immediately preceding the posting date of this RFP.

_____ I hereby certify that I am a Resident disabled veteran or business located in a designated enterprise zone in accordance with Neb. Rev. Stat. § 73-107 and wish to have preference, if applicable, considered in the award of this contract.

_____ I hereby certify that I am a blind person licensed by the Commission for the Blind & Visually Impaired in accordance with Neb. Rev. Stat. §71-8611 and wish to have preference considered in the award of this contract.

FORM MUST BE SIGNED USING AN INDELIBLE METHOD (NOT ELECTRONICALLY)

FIRM:	Carahsoft Technology Corporation
COMPLETE ADDRESS:	11493 Sunset Hills Road, Suite 100, Reston, VA 20190
TELEPHONE NUMBER:	703-871-8500
FAX NUMBER:	703-871-8505
DATE:	2/6/2020
SIGNATURE:	
TYPED NAME & TITLE OF SIGNER:	Jennifer Kanach, Director of Proposals

Form A
Contractor Proposal Point of Contact
Request for Proposal Number 6214 Z1

Form A should be completed and submitted with each response to this RFP. This is intended to provide the State with information on the contractor's name and address, and the specific person(s) who are responsible for preparation of the bidder's response.

Preparation of Response Contact Information	
Bidder Name:	Carahsoft Technology Corporation
Bidder Address:	11493 Sunset Hills Road, Suite 100, Reston, VA 20190
Contact Person & Title:	Elizabeth Harrison, Account Representative
E-mail Address:	Elizabeth.Harrison@carahsoft.com
Telephone Number (Office):	703-581-6673
Telephone Number (Cellular):	
Fax Number:	703-871-8505

Each bidder should also designate a specific contact person who will be responsible for responding to the State if any clarifications of the bidder's response should become necessary. This will also be the person who the State contacts to set up a presentation/demonstration, if required.

Communication with the State Contact Information	
Bidder Name:	Carahsoft Technology Corporation
Bidder Address:	11493 Sunset Hills Road, Suite 100, Reston, VA 20190
Contact Person & Title:	Elizabeth Harrison, Account Representative
E-mail Address:	Elizabeth.Harrison@carahsoft.com
Telephone Number (Office):	703-581-6673
Telephone Number (Cellular):	
Fax Number:	703-871-8505

carahsoft.

February 7, 2020

State Purchasing Bureau
1526 K Street, Suite 130
Lincoln, NE 68508

Re: Carahsoft's Response to the State of Nebraska's Request for Proposal for a Mass Notification Service (MNS), Solicitation # 6214 Z1

Dear Ms. Gilliland and Ms. Schiltz,

Carahsoft Technology Corp. appreciates the opportunity to respond to the State of Nebraska (State)'s Request for Proposals for a Mass Notification Service. Carahsoft is proposing BlackBerry which fully meets the State's requirements. Our team has fully considered the State's requirements outlined in the Request for Proposals, and has carefully put together a solution that will best meet your needs. As a top-ranked partner for BlackBerry, Carahsoft has delivered best value solutions to our public sector clients for over 15 years.

Please feel free to contact me directly at 703.581.6673/Elizabeth.Harrison@carahsoft.com or Brandi Hiebert at 703.889.8722/Brandi.Hiebert@carahsoft.com with any questions or communications that will assist the State in the evaluation of our response. This proposal is valid for 90 days from the date of submission. We acknowledge Addendum One to this Request for Proposal. Additionally, we request the opportunity to negotiate the terms of the agreement in good faith at a later date.

Thank you for your time and consideration.

Sincerely,

Elizabeth Harrison
Account Representative

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EXECUTIVE SUMMARY

Prime Contractor: Carahsoft Technology Corp.

Carahsoft Technology Corp. is an IT solutions provider delivering best-of-breed hardware, software, and support solutions to federal, state and local government agencies since 2004. Carahsoft has built a reputation as a customer-centric real-time organization with unparalleled experience and depth in government sales, marketing, and contract program management. This experience has enabled Carahsoft to achieve the top spot in leading public sector software license resellers.

VENDOR RELATIONSHIPS – Carahsoft has a unique business model focusing on providing superior sales and marketing execution, a track record of success, high integrity, and a focus on strategic vendor relationships, of which **BlackBerry** is an important part. Carahsoft's contract vehicles carry over 200 vendors.

PROVEN EXECUTION – Carahsoft has leveraged its vast contracting experience and extended it to quoting and order management. Carahsoft seamlessly generates quotes within 30 minutes or less and processed over 87,000 orders in 2018 that were each completed the same day received.

CONTRACT VEHICLES – Over the past 15 years Carahsoft has acquired and maintained a wide variety of purchasing contract vehicles for agencies at the state, local, and federal levels. Associated with all contracts are dedicated and experienced contract management resources. A list of available contracts can be found at www.carahsoft.com/contracts/index.php.

GROWTH & STABILITY – Carahsoft has continued to show impressive growth year after year, with annual revenue of $3.4 million in our first year in 2004 to $5.3 billion in 2018. In September of 2018, 10,393 orders were processed worth over $1.1 billion. We are a stable, conservative, and profitable company and have received numerous accolades, as detailed on our awards page: http://www.carahsoft.com/awards.

Requested Company Information

Name of Company/Organization: Carahsoft Technology Corporation
Address of Company/Organization: 11493 Sunset Hills Road, Suite 100, Reston, VA 20190
Home Office address: 11493 Sunset Hills Road, Suite 100, Reston, VA 20190
Type of business entity: Corporation
Place of Incorporation: Maryland
Year founded/established: Incorporated in MD 10/25/1999

Solution Provider: BlackBerry

BlackBerry AtHoc is a complete and integrated Critical Communication Solution that allows organizations of all sizes to send mass **Alerts** via multiple communication channels, **Collect** actionable information from the field, achieve 100% **Accountability** of personnel, and securely **Connect** with external organizations to enable critical information sharing.

BlackBerry AtHoc can:

- **Ensure accuracy of contact information** by integrating with enterprise directories and supporting end-user Self-Service updates.
- **Unify all communication channels and devices** via a common interface to simplify activation, ensure message consistency, and reduce communication time.
- **Manage the notification process across the enterprise** with pre-defined templates, operator access policies, multi-location support, alert activation flow consistency, real-time tracking, and reporting.
- **Transform your existing IP network** into an enterprise-class mass notification system to ensure maximum reach and rapid communication across the organization.

System Architecture

BlackBerry AtHoc is offered as a fully vendor hosted SaaS solution that supports localized, centralized and enterprise-wide deployments. The system is available 24x7x365 with built-in redundancy enabled from BlackBerry's geographically disperse NIST SP 800-53 certified data centers. The primary data center is hosted at a Microsoft Azure facility in Dallas, TX with a redundant failover facility in the greater Ashburn, VA area hosted by Equinix. In case of a localized network outage, the Ashburn, VA data center will automatically provide Business Continuity and full system capabilities.

BlackBerry AtHoc's SaaS solution eliminates the need for additional dedicated and expensive **State of Nebraska** provisioned communication lines or equipment with the use of our Notification and Delivery Managed Services (NDMS). BlackBerry AtHoc's NDMS is a hosted telephone communications service that provides for top-priority notifications over SMS Text, secure email and mobile phone applications, and secondary priority notifications to include telephone alerts to all landline phones, mobile phones, and Voice over IP (VoIP) telephones using robust text-to-speech technology. The NDMS meets National Institute of Standards and Technology (NIST) compliance requirements.

Requested Company Information

Name of Company/Organization: BlackBerry Corporation
Address of Company/Organization: 3001 Bishop Drive, Ste. 400, San Ramon, CA 94583
Home Office address: 2200 University Ave. East, Waterloo, Ontario, Canada N2K OA7
Type of business entity: Corporation
Place of Incorporation: Delaware
Year founded/established: FY 2000. Originally Research In Motion Corporation and changed name to BlackBerry Corporation on July 10th, 2013

CORPORATE EXPERIENCE

Due to the high volume of RFP responses that we are responding to and the request for references we are obligated to ensure we do not unduly burden our current clients. Therefore, we agree to provide specific company references with contact details once BlackBerry-AtHoc has been chosen as a finalist for evaluation.

BlackBerry AtHoc security solutions are deployed, tested and trusted in many of the world's largest and most demanding environments with the highest security restrictions. Many of these organizations have also done extensive pen testing of BlackBerry solutions, and are using them in mission-critical environments, including:

- 100% of the U.S. Military
- 70% of the U.S. Federal Government Agencies
  - Department of Energy, Department of Treasury, Department of Agriculture, Department of Veterans Affairs, U.S. Senate, U.S. House of Representatives, Federal Aviation Administration, Department of Justice, State Department
- U.S. Homeland Security
  - Immigration and Customs Enforcement, U.S. Coast Guard, TSA-Transportation Security Administration
- Canada: Canadian Parliament, House of Commons, Cidel Bank & Trust, EDC-Export Development Canada, LifeLabs, Ville de Pointe-Claire, Metrolinx
- Many Law Enforcement Agencies
  - City of London, Durham (Canada) Regional Police
- Some of the largest State & Local Government Organizations like Contra Costa County, CA; Mississippi Emergency Management Association, etc.
- Many of the largest Global Enterprises and largest Local Government Agencies: General Electric, Robert Bosch LLC, Komatsu, Microsoft, Milliken, Tenneco, Eastman Chemical, Time Warner, Dow Chemical, Procter & Gamble, Marathon Petroleum, Sumitomo Corporation, Texas A&M, Baylor Scott & White Health Care System, Red Cross, Mississippi, Emergency Management Agency, USS-POSCO Industries, Port of Houston Authority (POHA), Contra Costa County, etc.

Below are examples of past solution experience used as a foundation of the proposed solution.

Fully Integrated Community Public Warning System

Contra Costa County	
	1.1M residents, integrated public warning and industrial safety. Award-winning, all-hazard public warning and industrial safety system used to notify all residents living near oil refineries in the county and was one of the firsts approved systems to connect with IPAWS. • Customer since 1995; has renewed and expanded scope every year; initially built for HAZMAT only; now all HAZARDS warning system. • An all hazard integrated, full CAP interoperability solution; connected to 315,000 households, six refineries and chemical plants in high risk facilities, PSAP in several surrounding cities and California Highway Patrol and others.

US Military Community Mass Notification System - Globally

United States Army	
	The US Army has standardized on AtHoc for unified mass notifications across the entire Army community for mass notifications to 750,000 users. • Multi-community mass notification system, offered as a service to all Army emergency operators • Secure data center with upload of contact data as well as self-service portal • IPAWS WEA integration across 60 communities • Outdoor siren integration for 10 largest communities • Connected to joint basing environments for interoperability (Army speaks to Navy, USAF, USMC and others) • Connected to local community police and hospital agencies

Federal Government – Civilian

Veterans Affairs (VA) – VA (Central Office) Enterprise Personnel Accountability System (VA-PAS)	
	VA has used AtHoc IWSAlerts since September 2010. The system is deployed enterprise-wide to 21 Veterans Integrated Services Network (VISN) and VACO to notify personnel, Area Emergency Managers (AEMs), etc. via desktops, email, telephony and SMS text messaging. Total users supported currently at 560,000. In addition to Telephone Alerting and Network Alerting, the VA has also incorporated Personnel Accountability, via the U.S. Navy SPAWAR PAAS system. Therefore, the AtHoc solution is fully integrated with the Navy's solution enabling VA Personnel Accountability System known as VA-PAS.

Country-wide Public Warning System

Mexico Seismic Public Warning	
sarmex®	Fast response radio alert system (5 states, covering 1.8 million residents). BlackBerry AtHoc has implemented the seismic public warning system of the Mexico national earthquake system managed by the Mexico National Center for Prevention of Disasters (CENAPRED). AtHoc's Unified Mass Notification Solution, all in one step, enables Iztapalapa Mexico's Civil Defense Officials to protect lives from the continual threats of landslide, flood and earthquake in this high hazard geography.

PERSONNEL/MANAGEMENT APPROACH

Given BlackBerry AtHoc's extensive customer base, we have vast experience and best practices in managing the deployment and management of BlackBerry AtHoc based solutions. As part of BlackBerry AtHoc's Services organization, we have dedicated teams of implementation Engineers, Customer Advocacy and Trainers, Account Relationship Managers and Program Managers who will all work directly with State of Nebraska to tailor and implement Project plans based on requirements. The support provided by BlackBerry AtHoc is described as "relentless" and is fully staffed by BlackBerry AtHoc employees on a 24/7/365 basis. Our past performance credentials and references will confirm the performance of our support organization.

BlackBerry AtHoc is also proficient in meeting rigid standards and mandates. We evidence our success in this area by achieving 100% compliance with federal mandates including DIARMF, FIPS 140 -2, United Facilities Criteria, Federal Information Security Management Act (FISMA), DoD Directive (DoDD) 8500.1, DoD Instruction (DoDI) 8500.2 and NIST SP 800-37/53 as well as commercial mandates and certifications like NFPA, CAP Compliance , 508 Compliance and others.

BlackBerry AtHoc will provide project implementation services for the duration of a Project and assigns a Project Manager who will act as a single point of contact ("AtHoc POC") for State of Nebraska and will coordinate project activities with other BlackBerry AtHoc groups and State of Nebraska team through the acceptance of the system, and continuing on for the life of the system.

Work Assignment - Individual Roles and Responsibilities

The State of NEbraska/BlackBerry AtHoc partnership and implementation will involve a team made up of the following roles and responsibilities. Some roles may be combined such that one person would fill multiple roles.

Role	Description	Participation	Certification
Account Executive and AtHoc Executive Team	The Account Manager is ultimately responsible for the account, and maintaining the relationship with key customer personnel throughout the project life cycle and through ongoing operation. The Account Manager is kept informed of progress and status as well as any potential issues or "red flags", and resolution The Account Manager is accountable to the AtHoc Executive Team who are all part	The Account Manager participates in all key review gates, and in ongoing project status updates	

Role	Description	Participation	Certification
	of the success of each implementation		
Account Relationship Manager	The Account Relationship Manager leads the overall Customer Program throughout the life-cycle of the account. During implementation s/he is in continuous contact with the customer project manager, and implementation team. The Account Relationship Manager is responsible for the overall relationship with the customer beginning with the implementation and all ongoing operations.	The Account Relationship Manager either leads, as the Project Manager, or participates in all key review gates, and in ongoing project status updates	The ARM must complete Sales and Operations Training (SF, Quote Process, etc.) and be certified as an IWS Suites Project Manager and Functional Administrator.
Project/Program Manager	The project manager leads the implementation project and is in continuous contact with the customer project manager, and with the implementation team. The project manager is responsible for the successful completion of the project, on time and to full customer satisfaction. The project manager is responsible for many non-technical implementation steps, including procurement, training, break-in period, and for overall coordination with the customer	The project manager drives all key review gates, and manages ongoing project planning and status updates with the customer.	The project manager must be a certified IWS Suites Project Manager and Functional Administrator; and has completed Trainer class.
Technical Implementation Lead	For an enterprise implementation, technical implementation lead is leading the technical team, and is responsible for the technical implementations steps and, as needed, managing other implementation engineers. Many a time, the technical implementation lead will	The Technical Implementation Lead is involved in all key review gates and manages internally all technical implementation steps	The Technical Implementation Lead must be certified IWS Suites Project Manager, Functional Administrator, System Administrator, Installer and Trainer.

Role	Description	Participation	Certification
	continue to maintain technical relationship with the customer.		
Implementation Engineer	The implementation engineer is responsible for the actual technical implementation – installation, setup, integration, testing.	The Implementation Engineer participates in the technical review gates, to successful acceptance.	Implementation Engineer must be certified IWS Suites Project Manager, Functional Administrator, System Administrator, Installer and Trainer
Customer Advocate and Training Lead	The Customer Advocacy and Training Lead will be involved in all phases of an AtHoc enterprise implementation, from Internal Kickoff to Implementation Review. The Customer Advocacy and Training Lead is responsible for assisting other internal teams and directly interacting with key customers to manage expectations, analyze needs, and recommend best practices for the system functional use. The Customer Advocacy and Training Lead will maintain an operational relationship with key customers as part of an ongoing customer engagement and, as needed, manage other Customer Advocate and Trainers.	Customer Advocacy and Training Lead participates in the Internal Kick-Off, External Kick-Off, Operations Site Survey, Core System Setup, and Implementation Review	Customer Advocacy and Training Lead must be a certified Functional Administrator and Trainer
Customer Advocate and Trainer	The Customer Advocate and Trainer is responsible for the effective transfer of product knowledge to Operators and Administrators of AtHoc implementations using various media, methods, and techniques ranging from live online training and computer based training to onsite platform instruction and hands-on workshops. The Customer	The Trainer may participate in design reviews, implementation reviews and training sessions.	Customer Advocate and Trainer must be a certified Functional Administrator and Trainer.

Role	Description	Participation	Certification
	Advocate and Trainer provides customers with relevant ideas and perspectives on business process and practice improvements to optimize the user experience, and ensure customer success during both routine and emergency operations.		
Technical Support Team	Technical Support Team is responsible for managing all ongoing post implementation technical support and help desk issues. Once the break-in period is complete and system is in ongoing operation, there will be a technical support hands-off meeting, to review all implementation details	Ongoing operation	Technical Support Team members must be certified IWS Suites Functional Administrators, System Administrators, Installers and Trainers

Project Approach: Project Implementation and Post-Implementation Support Handover
The project implementation plan and post-support is a proven and structured process. The high level phases include Planning, Design and Build, Implementation, Training and Initiation and Production and Maintenance. Each phase builds upon the other using standard tools and processes as outlined in the steps below. The end result is a consistent project flow.

Number	Step	Description
100	Internal Project Setup and Planning	Internal kick-off, collection of information from the sales team, high level planning and preparation for the project and customer kick-off
200	Project Kick-Off with Customer and Site Survey	First meeting with customer, present project scope, get buy-in, set expectations and responsibilities, Collect initial technical and operational data required for detailed planning and execution. Follow up as required to complete data collection.
300	System Design and Specification	Use the data collected in the site surveys for detailed design and specification of the solution; perform a design review for completeness and feedback
400	Procurement	Based on project scope, procure system hardware, software and services, or work with customer to procure and deliver to installation site [Note: Step not required for this project as approach is fully hosted]
450	Customer Preparation	If needed, customer may need to prepare site, process IA certification, network configuration, communication across organization, etc.

Number	Step	Description
500	Core System Installation and Setup	Once services are in place, and site is ready – installation can proceed. This step includes system provisioning, configuration and setup. It may include integration with data sources.
550	Core System Testing and Acceptance	Once the core system is installed and configured, it is ready for end-to-end testing, and customer acceptance of core system.
600	Advanced Modules and System Extensions Installation, Configuration and Integration	In some cases, there will be additional scope to the core system; it may include advanced integrations, failover system setup, integration with local systems, and more. This step covers these activities, which may require coordination with other sites and other organizations.
700	Training	Training activities including planning, adapting the training material to the specific implementation (if needed) and completing all required training sessions
800	Break-in Period	AtHoc recommends going through a gradual and step-wise process towards operational capability across the entire organization; this period may take several weeks This is also the time for an implementation review, which will assess the actual implementation vs. requirements and plan. At the end of the Break-in period, there will be handover meeting to technical support, for ongoing technical support
900	Production and Maintenance	Once the system transitions into the production period, there will be ongoing activities, including technical support, preventive and corrective maintenance and follow-on/refresher training

Typical implementations include project implementation support provided on-site by AtHoc Professional Services Engineers(s). Upon final customer acceptance, ongoing support will be handled by the AtHoc Technical Support Team/Help Desk.

Project Accountability and Status Reporting

Status Reporting

During the implementation phase the BlackBerry AtHoc Technical Implementation Lead provides daily status reports (in email/Microsoft Word format) to State of Nebraska Project Manager and BlackBerry AtHoc POC.

Team Meetings

Project Team Meetings take place weekly as organized by the Project Manager. Other significant meetings are the Project Kick-Off, Site Survey, acceptance testing and Project Closure/ final de-brief immediately following acceptance testing. This final debrief can be helpful in transitioning the system to production/support and can be a forum for addressing items that are outside of the current scope of the project.

Project Milestones and Timelines

The BlackBerry AtHoc team will design a timeline based on specific State of Nebraska requirements. The TBD designation is a placeholder for State of Nebraska to determine the intervals for each entry, according to your implementation schedule. We have suggested intervals based on past experience on projects of similar scope; we will work with State of Nebraska to tailor this project plan to their needs.

MS	Description	Owner	Timeline
0	Contract Award	Customer	TBD
	Scope – Phone, SMS, Email, IPAWS		
1	On-Site Project Kick Off Meeting	Customer & AtHoc	MS 0 + 1 Week
2	Complete Operational & Technical Site Surveys	Customer & AtHoc	MS 1 + 5 Days
3	System Design and Spec	AtHoc	MS 2 + 15 Days
4	Customer Preparation for Installation	Customer	TBD
5	System Installation and Setup	Customer & AtHoc	MS 4 + 5 Days
6	Operational System Configuration	Customer & AtHoc	MS 5 + 20 Days
7	Integration and Testing with External Systems	Customer & AtHoc	MS 6 + 30 Days
8	Core System Testing	Customer & AtHoc	MS 7 + 3 Days
9	Training	Customer & AtHoc	MS 8 + 1 Week
10	System Verification and Acceptance	Customer & AtHoc	MS 8 + 5 Days

Deliverables

BlackBerry AtHoc will submit deliverables, as specifically directed by Operations and Security, to the designated State of Nebraska PM who will use reasonable efforts to accept or reject deliverables within five (5) business days of submission. We support this process formally as follows:

No.	Deliverable Name	Description
1	AtHoc Software, COTS	Sent to the customer immediately upon AtHoc's receipt of a purchase order from State of Nebraska.
2	Project Implementation Plan	BlackBerry AtHoc will conduct a survey of the customer environment and develop a project implementation plan. The project implementation plan will include project schedule, detailed requirements for installation and integration support. State of Nebraska and BlackBerry AtHoc will work together in the development of project implementation plan
3	AtHoc SaaS system provisioning (tertiary)	AtHoc will provision emergency notification capabilities for State of Nebraska in its hosted datacenter. This will be for phone, SMS and e-mail based notification alerts.
4	System Acceptance Tests	AtHoc shall conduct system acceptance tests, as described in the SOW and scheduled per the project milestones. Customer shall provide system acceptance upon contractor's completion of all agreed to test plans.

No.	Deliverable Name	Description
5	Training	AtHoc shall conduct onsite training for operators and system administrators, per the project implementation plan.
6	Documentation	AtHoc shall provide electronic access to soft copies of the training material, operations manuals and AtHoc software documentation.
7	Technical Support and Maintenance	On-going Software Assurance and Technical Support as per the Agreement.

BlackBerry AtHoc looks forward to working with Operations and Security on all facets of the implemented solution. One area of specific concentration will be around overall support, implementation, training and on-going activities to provide a support level that is unparalleled in excellence.

BlackBerry AtHoc considers the support aspect of our solutions to be of paramount importance for many reasons. The nature of what we do is mass emergency notification. Therefore, this vital system must be totally supported in all areas and well-coordinated with State of Nebraska system owners and administrators.

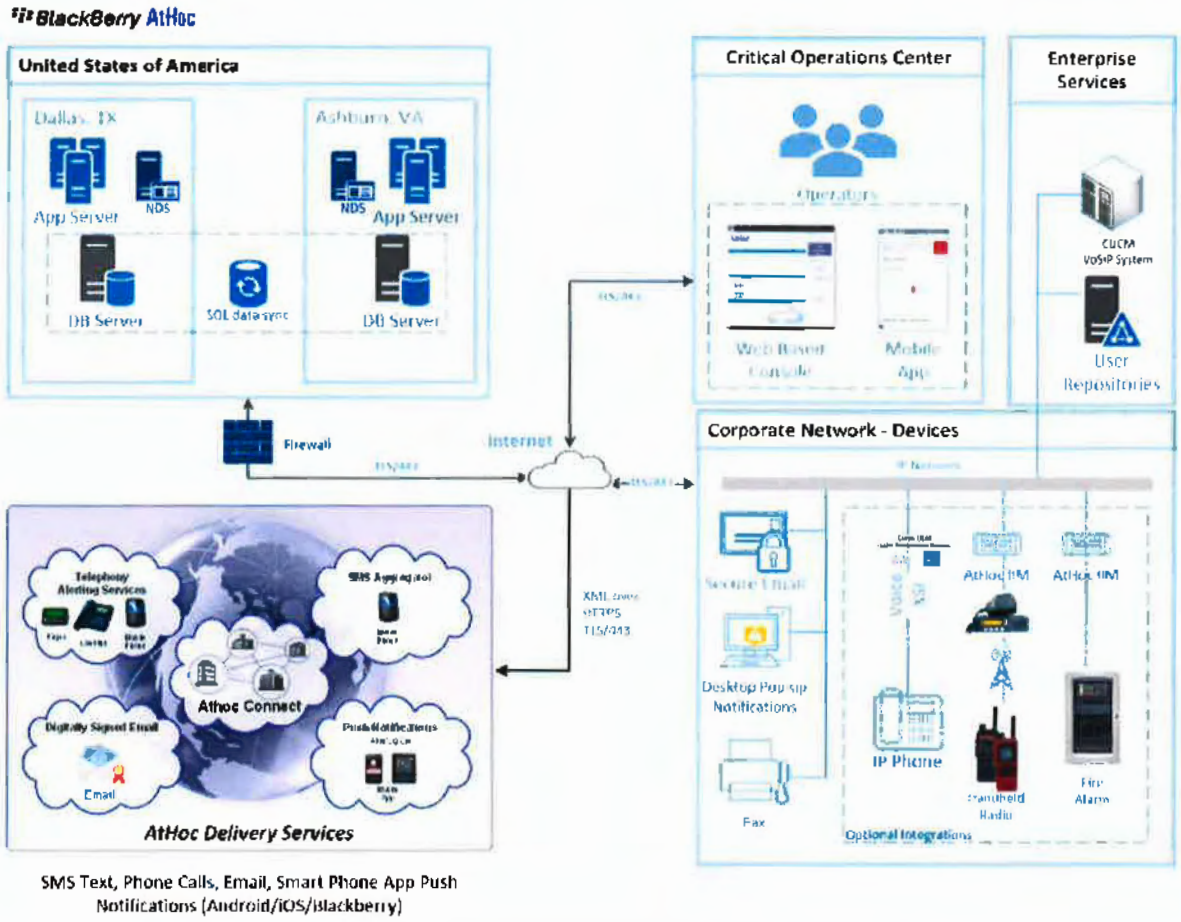
All services rendered will be conducted by qualified, certified and cleared BlackBerry AtHoc personnel. BlackBerry AtHoc Operations is comprised of the following participants:

- Implementation Engineers
- Technical Support Staff and 24/7/365 Help Desk Staff
- Customer Advocacy and Trainers (CAT)
- Senior Development Engineers and Quality Assurance Staff Members
- Chief Operating Officer
- Technical Resources for on-site and remote support

BLACKBERRY ATHOC SYSTEM OVERVIEW

System Architecture

The BlackBerry AtHoc SaaS solution architecture depicted below creates a fully integrated mass notification and critical communications solution for emergency and non-emergency use:



BlackBerry AtHoc Software-as-a-Service (SaaS) for Critical Communications

In addition to the NDMS, the proposed architecture also makes use of BlackBerry AtHoc's Personal Safety Service (PSS), which is used to push notifications to smartphone devices using the BlackBerry AtHoc Mobile App. When an alert is targeted at a user's smartphone/device, the BlackBerry AtHoc server signals the PSS to deliver the message. The PSS subsequently uses the native push notification service (APNS/FCM) for the device. The BlackBerry AtHoc Mobile App allows users to communicate bi-directionally with the BlackBerry AtHoc system on smartphones and tablets, independent of local carrier services, by leveraging local Wi-Fi or internet connection resources when carrier networks become saturated or unavailable.

A Unified, Web-enabled Solution

BlackBerry AtHoc's single web-based interface allows organizations to quickly communicate a consistent message across channels and delivery devices leveraging the system's robust and secure cloud-hosted telephony and connectivity services. BlackBerry interoperability capabilities, scalability, security, and regulatory compliance have earned the trust of demanding defense and commercial organizations including the DHS, DOJ, DOS, US Air Force, US Army, US Navy, US Coast Guard, Microsoft, MBDA, Eastman Chemical, Contra Costa County, Texas A&M, Macquarie University and others.

By deploying BlackBerry AtHoc, organizations of all sizes can rapidly contact tens of thousands of people in geographically dispersed locations during a crisis or business critical event. Using a single web-based console or the BlackBerry AtHoc mobile app, Operators from any location in the organization can activate the system to virtually any device, track user responses, and view accountability reports in real-time. Automatic notifications can be triggered by physical sensors and data feeds. Notification processes can be defined to support both enterprise-wide and individual department needs.

BlackBerry AtHoc Critical Communications Suite

BlackBerry AtHoc's comprehensive suite of applications, **Alert, Account, Collect** and **Connect**, unifies critical communications between organizations, people, devices, and external entities. The result: Leaders can make informed decisions to effectively protect the people they care about. These modules include alerting employees across all systems and devices, collecting information from employees for increased situational awareness, accounting for individuals in times of danger, and connecting with trusted partners in the broader community. With our comprehensive networked solution, **State of Nebraska** can achieve the most immediate and effective response to events within the enterprise and surrounding organizations.

Alert

Alert (Included) is a comprehensive, end-to-end critical notification system that unifies all communication modalities to alert everyone you care about with a single click. This allows emergency managers to provide rapid two-way communication and accountability capabilities across the entire enterprise or community to any targeted device with assured reach.

- Streamline your communication by utilizing pre-configured templates and custom fields, geolocation targeting, teleconferencing, escalation, and more
- Integrate with third-party solutions such as access control solutions, social media, fire alarm panels, sirens, mobile app, computer desktops, two-way radios, and wearable devices
- Delegate system management to local Points of Contacts (PoCs) while maintaining control and simplifying contact management with LDAP and .csv-based integration, in conjunction with our user-centric Self-Service Portal.

Unified Channel Delivery:

BlackBerry AtHoc allows organizations to quickly communicate a consistent message across multiple channels and delivery devices (customizable messaging per device) – all integrated using the organization's IP network.

The information is sent via multiple and redundant means, including:

1. **Networked computers** – Secure delivery of audio-visual pop-up notifications to computer desktops connected to the network through BlackBerry AtHoc's Desktop Notifications client. Through our desktop client Operators can target and deliver audio/visual pop-up notifications that are fully customizable. These notifications can be displayed as full-screen, or as a small box appearing from any edge of the screen:
    - BlackBerry AtHoc's desktop notifications are intrusive: Notifications appear over all other open desktop applications without user intervention. The content of these notifications may include title, alert content text, URL (for additional information), audio, and mapping capabilities. The Desktop Notifier includes several notification templates out-of-the-box, and each can be customized by the Operator and saved or copied for use in other templates or notifications – including controlling the alert size (cover a portion of the screen or the entire screen), color, border, fonts, and appearance.
    - Desktop Notifications are persistent: The notification remains displayed until either the recipient responds, the template timeout has been reached (e.g. 30 seconds, 1 minute, 5 minutes), or the notification is ended or expires. For offline users, alerts are "stored" by the server and all notifications that are live in the system are displayed when the user's computer comes online.
2. **Telephony** – Delivery of voice telephony alerts to any land, VoIP, or mobile phone via on-site or hosted mass dialing services
3. **Text messaging** – Delivery of text messages (SMS) to mobile devices and pagers.
4. **Mobile App** – Rapid and scalable delivery of push notifications to mobile devices, response collection, file attachments and location tracking. BlackBerry AtHoc's Mobile App provides two-way communication capabilities to all persons relevant to their proximity to critical resource and dispatch facilities using BYOD or enterprise-managed smartphones and tablets on iOS and Android. This capability allows for closed loop sharing of actionable information, such as rich media exchange (pictures, voice, text, and video), between First Responders and Emergency Management personnel in times of crisis. By leveraging OS native push technology, the BlackBerry AtHoc Mobile App is not dependent on cellular voice infrastructure. When the carrier's telephony infrastructure may be critically overloaded, push notifications may continue to be delivered either over the cellular data network or local Wi-Fi. BlackBerry AtHoc's Mobile Notifier features include:
    - Mobile Check-In or Check-out
    - Mobile User tracking (user-controlled)
    - Interruptive push notifications
    - Emergency/Duress
    - Field Reports
    - Operator access to Quick Publish templates.
    - Alert Notification File Attachments
5. **Secure Email** – Digitally PKI signed email delivery with attachments, multiple customizable response options that recipients can utilize to respond to the communication. Email templates are fully customizable and are mobile-friendly as well.

Mass Communication Devices (optional)

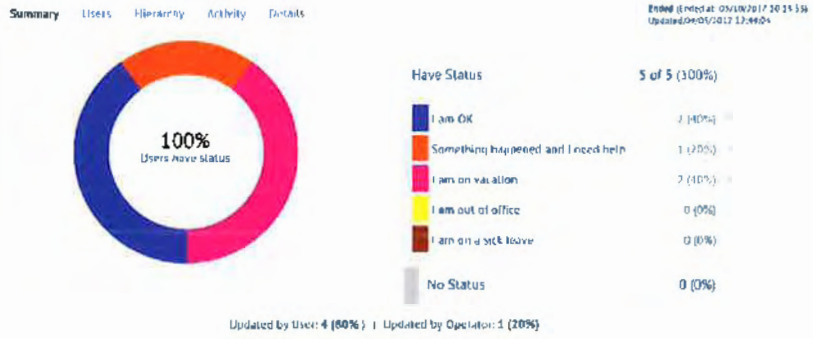
BlackBerry AtHoc optionally supports mass notification devices that communicate indirectly with large numbers of people, such as:

- **Social Media –** Send alerts through popular social networking channels, including Twitter and Facebook
- **Indoor and Outdoor Speakers** – Audio notifications to outdoor sirens and indoor public address (PA) systems
- **Digital Message Displays –** Activate text and graphical notifications to digital message boards and players.
- **Cable/Satellite TV –** Text, ticker, image or video alerts sent to digital displays
- **Land Mobile Radio Broadcasts –** Audio broadcasts to Land Mobile radio systems
- **XML Feeds** - Output standard XML and CAP feeds (RSS, Atom, and others) integrating with other systems and websites.

Account

Account enables real-time visibility into personnel location and status for effective crisis handling and response. An operations center or the organizational leadership uses Account to request status from select groups or the entire populace. For example, account for people post emergencies, recall personnel and conduct daily mustering. Emergency management is provided an accurate summary view or detailed delivery report of each alert recipient across the enterprise. Users can also provide unsolicited reports of their current status and location.

- Detailed enterprise-wide and multi-level personnel reports for compliance
- Activate real-time tracking on smartphone to give operations your location as you move
- Utilize online self-service portal to gain visibility at the individual level of local needs and requirements



Account provides comprehensive protection in three key areas:

1. **Readiness** - Ensures that geographically dispersed personnel are continuously accounted for and available to perform assigned duties. This vital readiness information enhances operations continuity.
2. **On-Scene Operational Accountability** – Field personnel can communicate directly with HQ. As they perform daily operations, their location and status are always known.
3. **Post Event Assessment** - In crises, alerts individuals and sends a request for the status of personnel in the incident vicinity. Leadership can rapidly assess the impact on operational readiness, then deploy assets to manage the incident and provide assistance to individuals in need.

Collect

Collect empowers our customers to gain greater awareness and make better operational decisions by enabling field personnel to provide actionable information directly to the Operations Center. Collect gives personnel in the field the ability to report events with rich geo-tagged media reports, plus a one-click "Panic" button to report emergency situations for rapid response. The operations center can see what is happening at any incident scene, enabling rapid and effective critical event management.

- Report events or observations from the field with rich media
- Initiate user-identified, geo-sensed "duress" and attach rich media
- Gather and apply business rules of incoming events and route to the appropriate teams
- Activate location tracking and share with the user's team or operation center

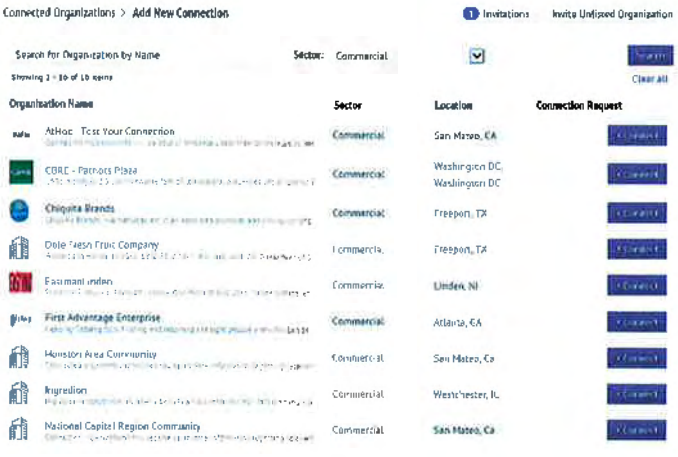
The Collect feature empowers every person in your organization to report events, and operational status using geo-tagged, multimedia information, directly from the field. With Collect, every person becomes eyes and ears of your organization.

Connect

Connect bridges the communication gap between organizations during critical events. It allows organizations to share authoritative information with externally targeted organizations and agencies in real-time during crises. This empowers the connected community to collectively assess situations and provide a coordinated response to protect lives and property.

- Seamlessly connect with organizations in your community before or during an event
- Be confident your communications have reached connected organizations within a single workflow, without picking up a phone or radio
- Eliminate the need to manage contacts for external organizations
- Receive relevant information from other organizations as well as external content feeds

Connect enables our customers to communicate and collaborate with greater effectiveness, authority, and control in times of crisis. It solves the need for inter-organizational communication domestic and international organizations by integrating the ability to communicate with other entities into a single notification process.



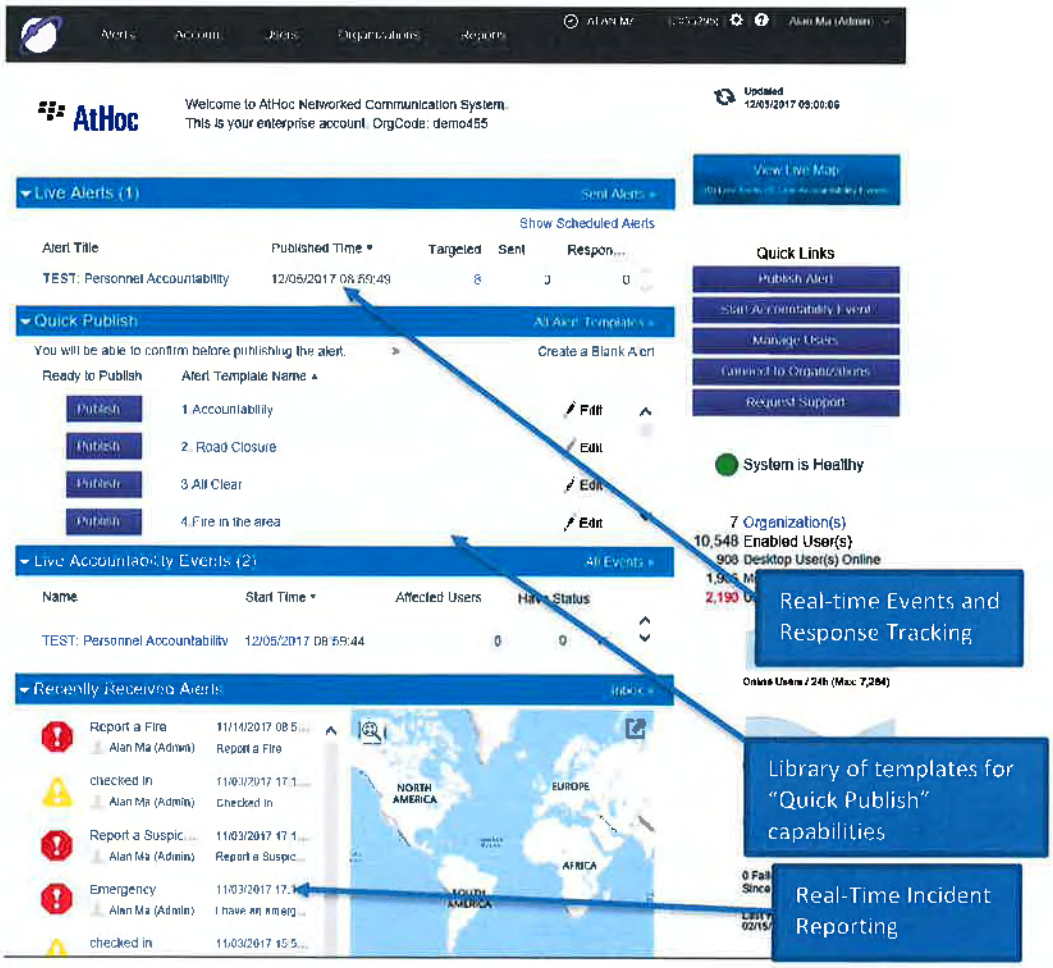
Customers control the formation of their Connect networks, including determining who is invited to participate and what types of communications are shared - both sent and received. All data is protected with the highest level of security driven by customer Information Assurance requirements – provides proven enterprise-level experience providing on premise protection of PII behind organizational firewalls. Connect seamlessly enables our customers to reach enterprise personnel internally, but also external organizations that need to be aware of a crisis event. This unique feature results in faster and more coordinated

responses among otherwise disconnected enterprise organizations, and simplifies workflows, which eliminates the need for manual telephone and radio notifications as part of initial crisis response.

Additionally, Connect eases administrative burdens by providing organizational-level management of contact information. Affiliate organizations maintain their own data and manage their business processes for notifications. During the crisis response, organizations noify their "connected" partner organizations, who in-turn automatically notify affiliate users based on their internal business rules. With Connect, our customers are assured that their communications have reached their intended audience.

The Management Console

BlackBerry AtHoc offers speed of system implementation as well as easy, convenient access through any web browser (including modern mobile browsers). The Operator achieves command and control without being reliant on any one computer console and can activate communications workflows to virtually any location and to any device, track responses and view accountability reports. Operators from different locations can sign in with their credentials, and based on Administrator-controlled permissions, access a personalized view of the BlackBerry AtHoc web-based management console, as depicted in the following example:



From the management console Emergency Managers have the ability to activate either pre-configured or on-the-fly notification templates, view and download real-time notification summary statistics, review of Accountability Events, manage users and connected organizations, and observe the overall health of connected sub-systems.

A library of pre-configured templates is available for a "Quick Publish" capability that allows Operators to quickly communicate with the targeted audience without the need to build the notification contents from scratch. These Quick Publish templates are easily populated with preconfigured placeholders that allow specific details of an event to be published while maintaining consistent communications guidelines.

Notification Workflow

Creating alerts

BlackBerry AtHoc's easy-to-use solution allows Operators to create and publish notifications by following a concise and easy workflow, composed of four simplified steps:

- **Content**: Title, Body, Informational Links, Placeholders and Response Options
- **Targeting:** Target users based on Organization Hierarchy, location, role, department or device
- **Devices:** Target personal devices such as cell phones, email, SMS Text, Mobile App, Mass Communications Devices, with customization options for each
- **Scheduling:** Schedule future and recurring notifications using intuitive, touch-friendly controls

These sections are intuitive and easy to use, allowing at-a-glance review during the notification creation process. Notifications can be configured and saved for later use and are easily edited on-the-fly when circumstances dictate. The system may be configured with a library of pre-configured alert templates that include common emergency events such as weather alerts, evacuation alerts, threats, warnings, Personnel Recall notices, Accountability Drills and more. Furthermore, Operators may be segregated based on location, team, department or any combination of targetable attributes, allowing granular access to subscribers, operators and alert template folders for each Operator.

Notification Content

The content section allows for a detailed alert write-up that includes customized response options with call bridge support, additional information via target URL for rich media and documents (web link, image, video, audio, Word, Excel, etc.) as well as standard response options. Alert attachments are shared over email and the BlackBerry AtHoc mobile app:

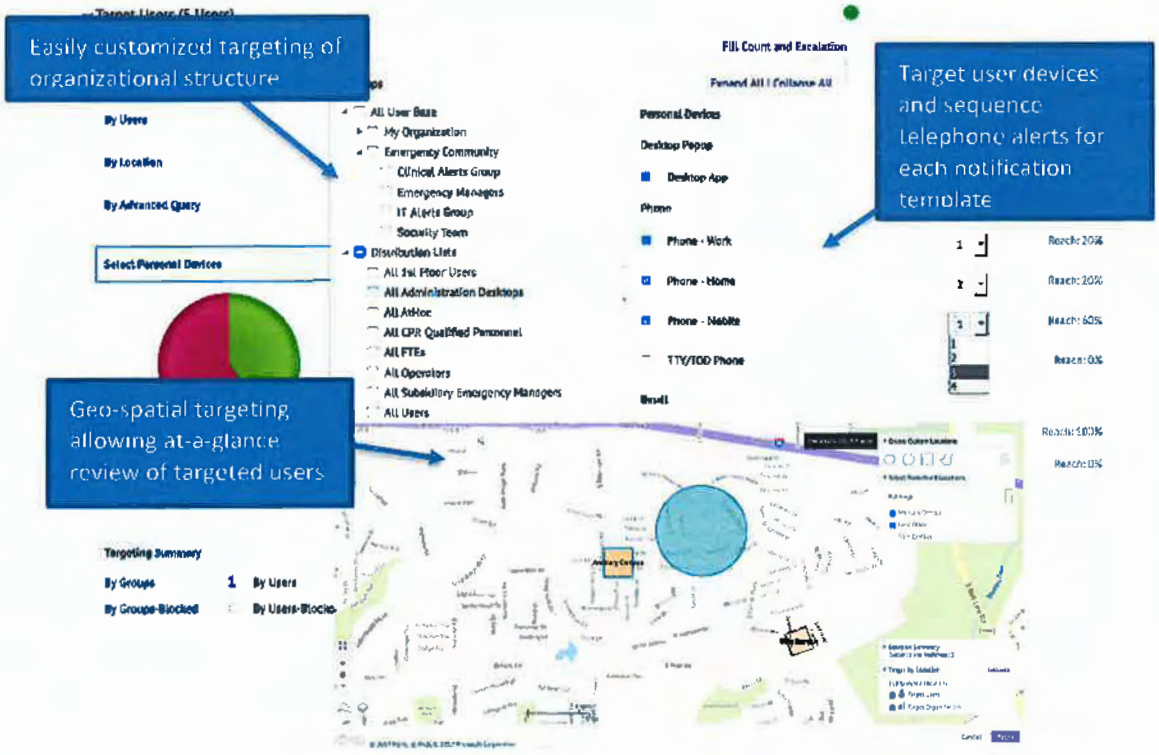
The system supports the following specifications for size and length of content:

- Unlimited voicemail notification length, subject to voicemail provider restrictions.
- SMS text message length of 160 characters per standard SMS text limitations; long messages are broken into multiple messages based on SMS character lengths and are reassembled on networks and smartphones which support concatenated SMS.

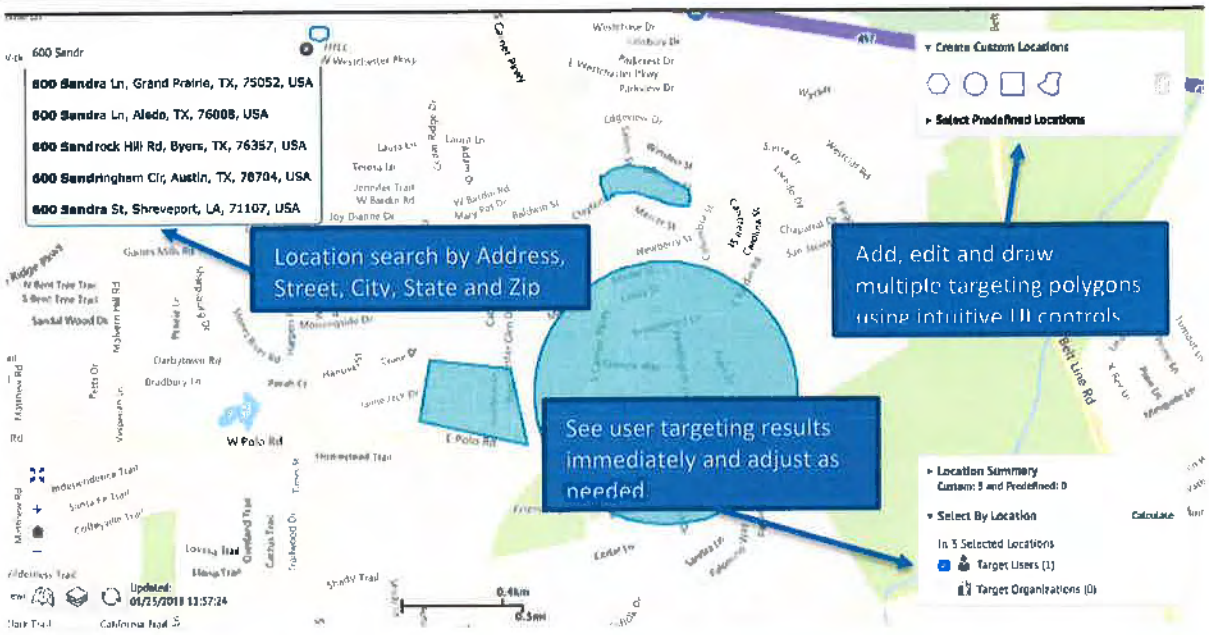
- Email notification length of 2,000 characters.
- Email notification can be implemented with an HTML template.

Notification Targeting

BlackBerry AtHoc can target subscribers to receive notifications based on organizational structure, distribution lists, physical location, individual name or dynamic database query. Personal and mass notification devices (e.g. digital signage) can be targeted using visual geographic maps, enabling the selection of buildings, regions or zones to be notified. Dynamic targeting can be accomplished by using a combination of attributes such as role, building, personnel qualification, or location. During the publishing flow, an Operator can issue a follow-up notification to subscribers based on the notification response, e.g. targeting those who did not respond to the initial alert, or block or remove individual recipients by name from a targeted distribution list set for notifications.



Using this methodology, Administrators and Operators define groups of recipients for targeting purposes as well as for managing operator's access policies. Distribution Groups can be based on hierarchical organizational structure (as imported from personnel repositories), organizational roles, specific distribution lists (e.g. HAZMAT teams), dynamic groups created through dynamic queries (i.e. organizations, buildings within organizations), Windows domains, usernames and machine names, or any other custom attribute. BlackBerry AtHoc also supports ESRI-based, geo-centric targeting that allows Operators to target recipients by region, zone, address and point of interest or longitude/latitude. The map interface allows the Operator to search based on address, city, state or zip code:



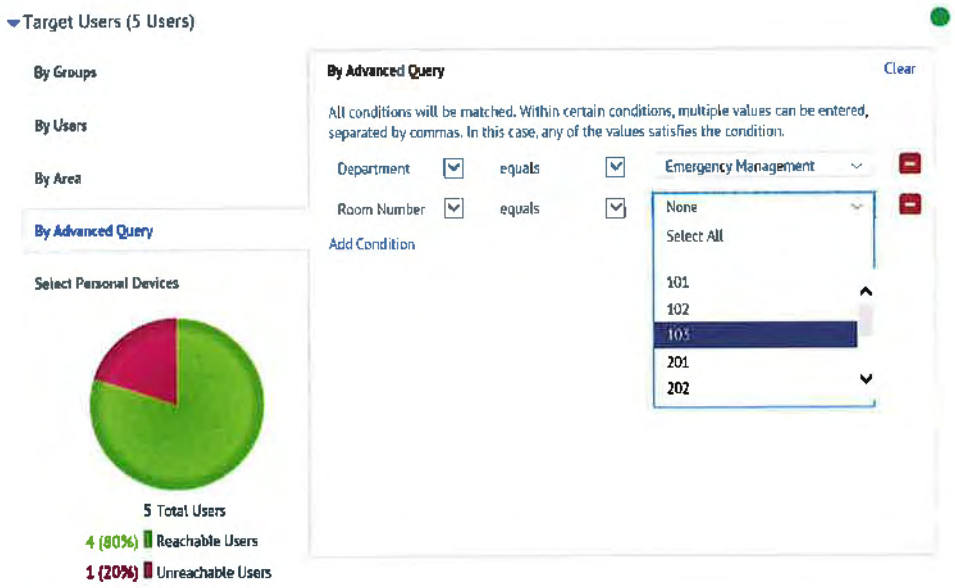
Target by Organizational Structure

The system can target recipients to receive notifications based on a pre-existing organizational structure and supports nested organization layers that are easy to follow. The Organization structure can also be manually configured by the Operator or an Administrator using intuitive drag-and-drop controls:

Groups	Expand All Collapse All
▲ ☑ All User Base	
▲ ☑ Organization	Block
☐ Accounting	Block
☑ Administration	Block
☐ Admitting	Block
▸ ☐ Emergency	Block
☑ Engineering	Block
☐ Human Resources	Block
☑ ICU	Block
☐ Information Systems	Block
☑ Nursing	Block
☐ Purchasing	Block
▸ ☐ Subordinate Organizations	Block
▸ ☐ Emergency Community	Block
▸ ☐ Distribution Lists	Block

Customizable Targeting Queries

Dynamic targeting can be accomplished by using a combination of attributes such as individual, role, or geo-location. During the publishing flow, an Operator can issue a follow-up alert to users based on the notification response, e.g. targeting those who did not respond to the initial alert, or block or remove individual recipients by name from a targeted distribution list set for notifications.

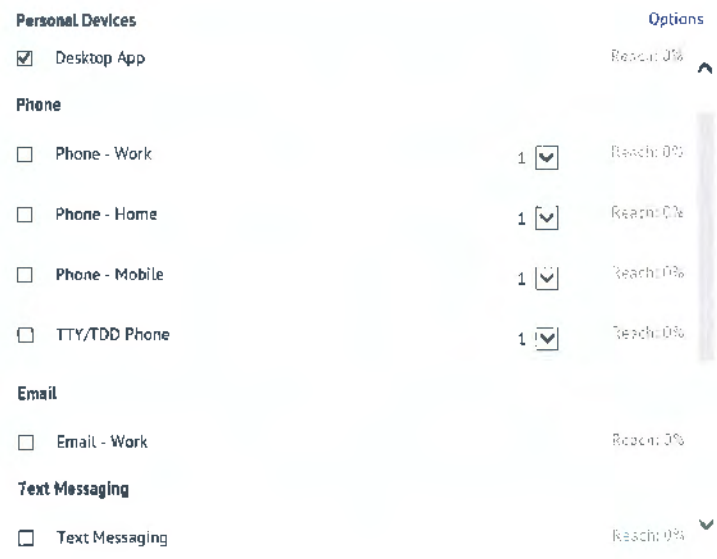


Definable queries based on attributes in the system may be stacked as necessary to enable fine-grained control over the targeting audience, with the ability to review total reach of the targeted audience, including display of detailed information about each user selected and whether they can be reached on the selected devices.

Device Targeting

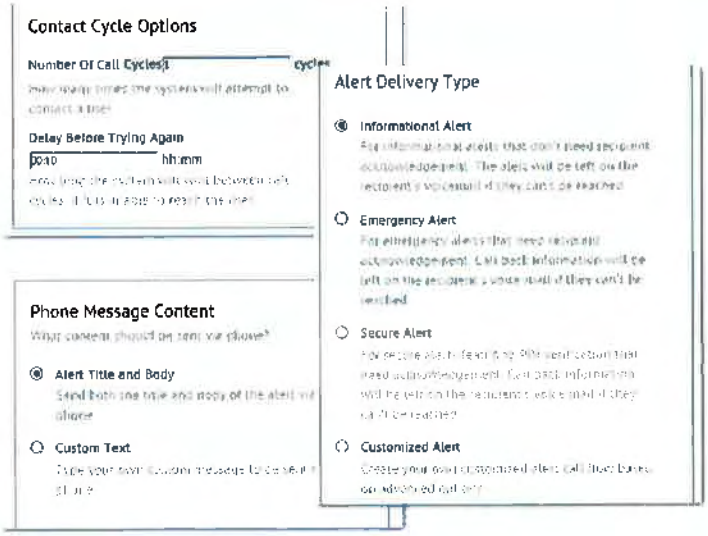
The BlackBerry AtHoc system provides unlimited notifications to a multitude of delivery devices/systems including landline and wireless/cellular telephones, SMS Text, digitally signed email, mobile and desktop applications and more. The variety and reach of the devices supported by this system creates a pervasive, wide-spread notification and response capability.

The system offers numerous options for call delivery on a per-alert or per-configured template basis. These include customizable alert text per-device that allow a brief message to be transmitted by phone, yet the full text-based message (for example) to be sent by more efficient means to the user's email, phone or other notification modality. These options conserve valuable carrier resources, while transmitting the notification to the recipients as quickly and efficiently as possible. Recipients can easily and quickly respond to notifications by selecting the corresponding number associated with the Operator's published response option (e.g. "1: I am ok.", "2: I need help"). This response capability is persistent, available across all personal delivery devices, including telephony-based message delivery (DTMF), SMS Text, Mobile App and PKI-secured email.



Additionally, BlackBerry AtHoc's Telephony-based notifications allow Alert Publishers to select the delivery method of telephone message when the system identifies a non-response. Operators can choose to leave the full notification message on the recipient's voicemail or leave call-back information that includes PIN-based authentication to retrieve the message and ensure secure delivery.

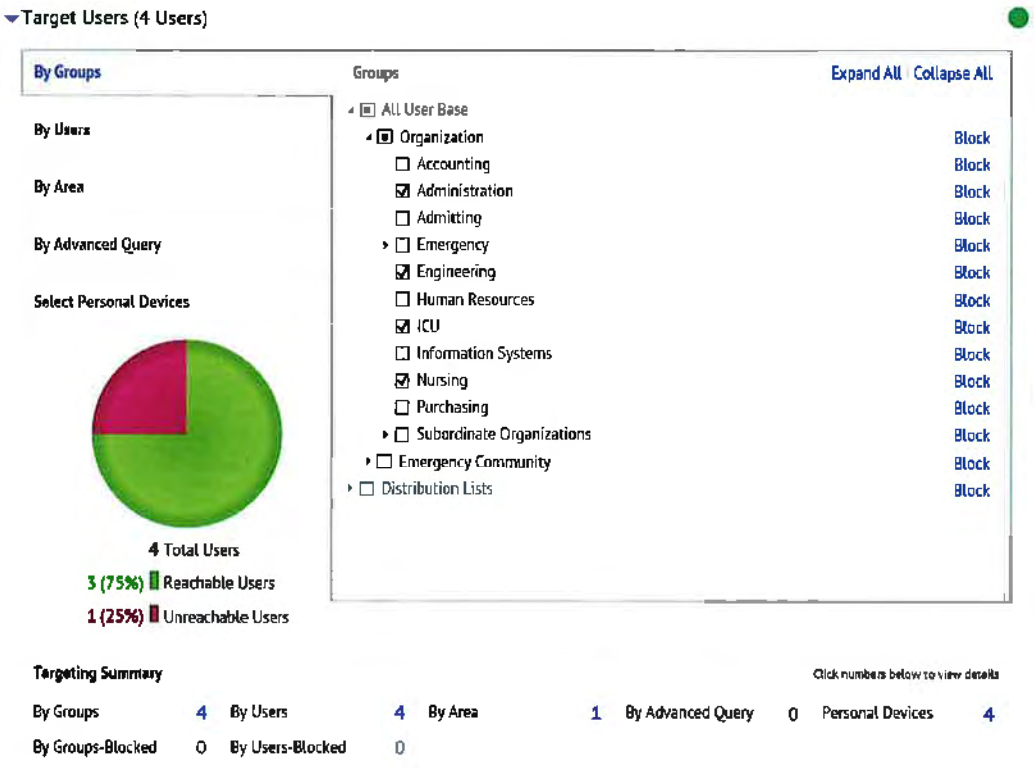
The BlackBerry AtHoc system also uses a number of mechanisms to unify notification amongst delivery devices and services. Many of these methods of notification have specific limitations (i.e. text only, audio only, character count, etc.) around their ability to accurately communicate a message. BlackBerry AtHoc allows Operators to customize each notification by selecting pre-recorded audio or Text-To-Speech (where appropriate), specific content, delivery templates,



cycling and delivery attempts, as well as settings per delivery device/service.
The system also offers call-bridge capabilities that allow recipients to easily and automatically connect to a telephone conference bridge with a single key-press without the need to dial conference bridge numbers or remember specific access codes. This conference bridge capability uses customer-supplied teleconference services, and if an additional layer of security is necessary, may use a pin requirement prior to recipients being connected to the conference bridge.

Patented Predictive Alert Technology

The BlackBerry AtHoc solution also features our patented **Predictive Alert Technology**, a unique feature that allows Operators visibility into the effective reach of any notification based on the devices selected for the communication. It correlates the device with available user contact data (email, phone number, text number, software, etc.), and if the contact data is unavailable for any of the targeted recipients, a pie chart on the right will show RED for awareness. This critical awareness tool enables Operators to selectively target only those device modalities that will ensure 100% coverage of the notification, *before* the notification is published.



Scheduling Options

BlackBerry AtHoc supports full alert lifecycle options that allow Operators to set granular scheduling options for future notification events. These include Recurrence Options that allow notifications to be published automatically to users who meet specific dynamic targeting criteria (e.g. all recipients with an email address, but those without a Work Phone number).

Device Priority

The BlackBerry AtHoc system offers numerous options for call priority, based on a per-alert or per-configured template basis. Operators can select a customizable order that allow messages to be transmitted by pre-determined rules. These options conserve valuable carrier resources, while transmitting the message as quickly and efficiently as possible.

Additionally, Contact Cycle options continuously call a given device until a positive receipt of the message has been verified, either by telephone or from another targeted device, such as SMS or email.

Responding to Notifications

Recipients can respond to notifications using a simple and intuitive process that minimize response time during accountability events.

Acknowledgement can be made during telephone calls simply by selecting the appropriate response option number, or by responding to the email or the SMS Text in the same manner. From the BlackBerry AtHoc Mobile App, response options are presented in an easy-to-follow way that conforms to strict platform design requirements.

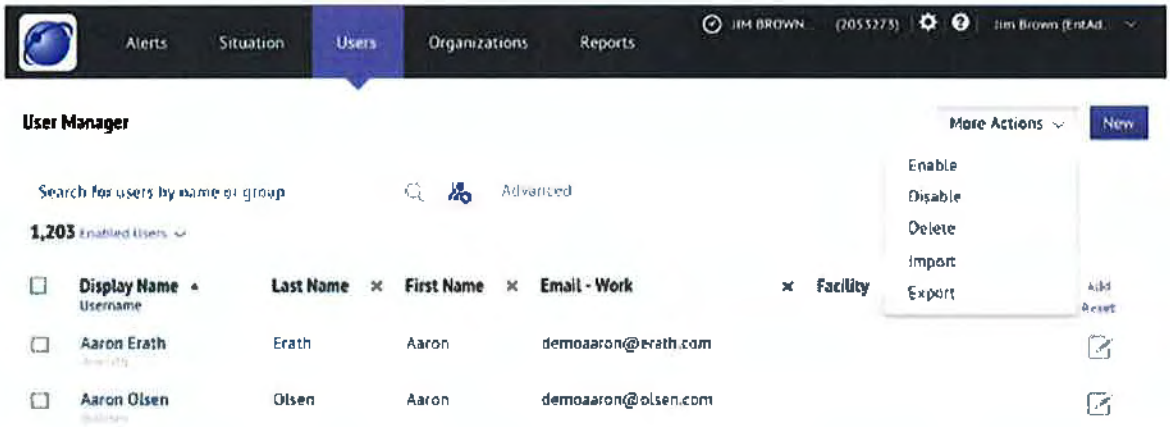
As part of the notification publication process, Operators can select group escalation and fill count options, or device call cycle options that will continuously repeat the notification at the user's device(s) until a response is either received, the notification is ended by the Operators or the notification period has expired. Targeted alert recipients who do not respond to an alert are clearly identified to provide fast and efficient accountability visualization.

Manage Contact Information

BlackBerry AtHoc has comprehensive user directory and management functions for administrators that are scalable for the largest of enterprise needs. User management capabilities include viewing, editing and creating new users, editing user details and contact information, managing distribution list memberships and importing/exporting user data.

The User Directory also allows for easy creating customizable attributes that can be used for targeting throughout the organization, and support various formats (such as text, numbers, and picklists) that utilize standard UI components (e.g. radio buttons, multi-select checkboxes).

The BlackBerry AtHoc system supports manual add/edit/remove of contact information by Operators and Administrators via the User Management Portal. The portal allows Operators to export, import, add, edit and delete user information, including account Information, Distribution List membership, and any custom attribute that has been imported from other authoritative systems (such as Active Directory) or .csv files, or manually entered through the Self-Service Portal:



The User Manager console provides authorized operators to manage users within their organization or department. Users are defined as those that receive alerts, Operators with varying degrees of privileges, or administrators that configure system settings.

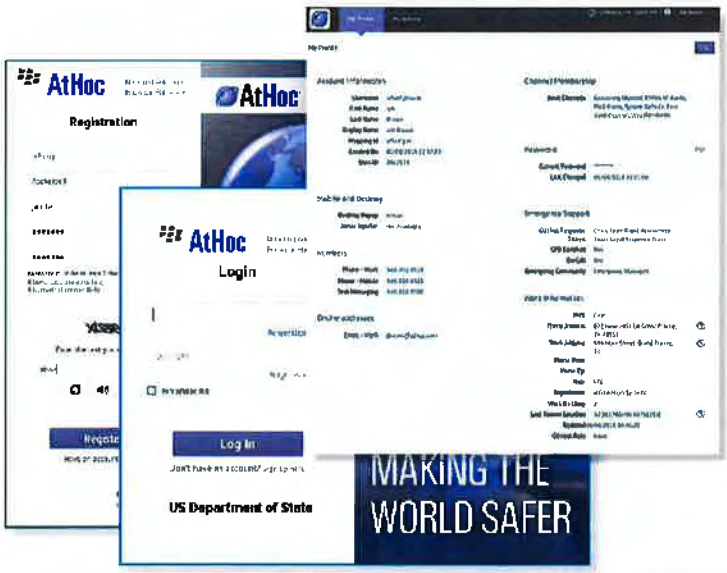
Self-Service Portal

The BlackBerry AtHoc Self-Service Module allows administrators to optionally delegate contact information management to end-users in order to correct and minimize missing or inaccurate contact information that may have been imported from an LDAP directory or other authoritative source. BlackBerry AtHoc's Self-Service portal allows for user self-registration, contact data information update, alert channel subscription management, management of dependents, and viewing and responding to live alerts.

User Profile

Users may view and update their contact data and targeting attributes (with properly granted permissions). Permissions are centrally managed and configured by Administrators or End User Managers.

Viewable fields are configurable as read-only or editable as configured by the System Administrator. In addition, System Administrators may create multiple fields for telephone numbers (to include personal and business numbers), email and SMS Text fields.

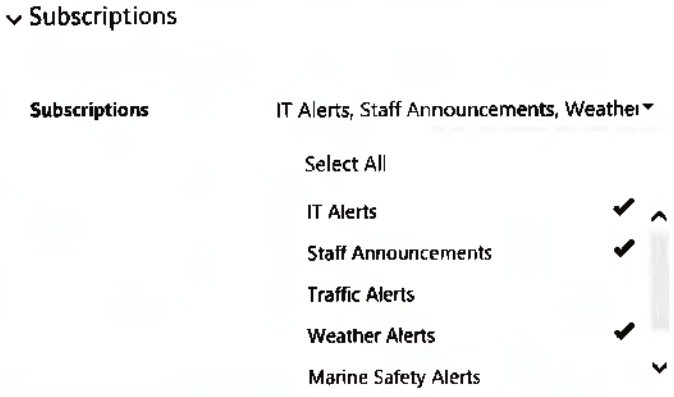


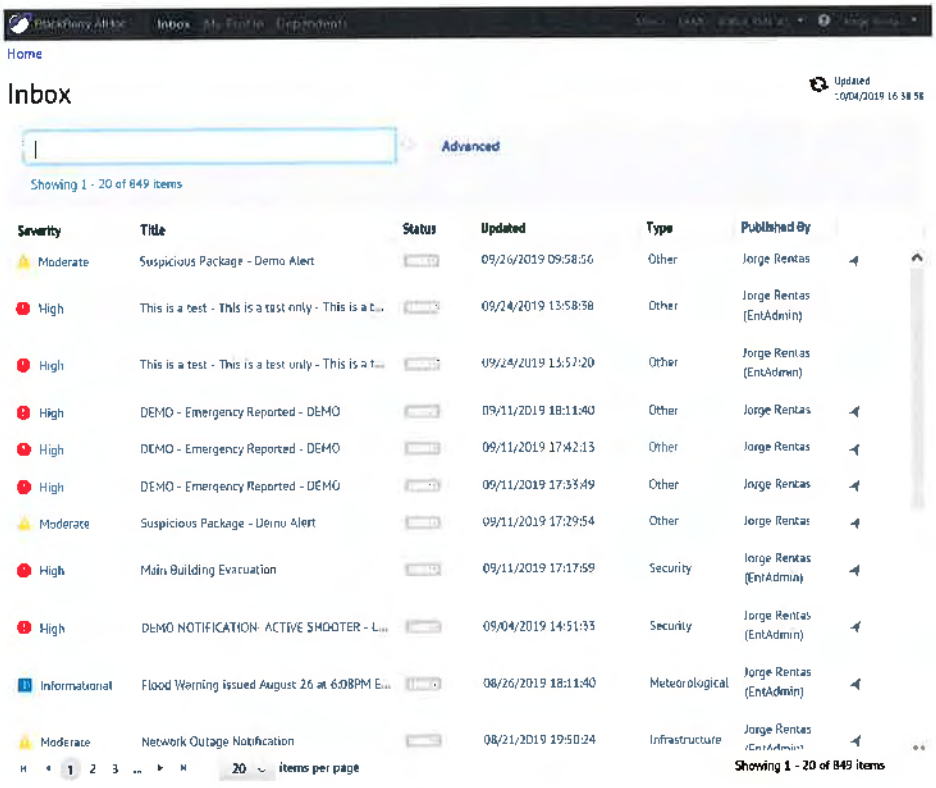
Users can also subscribe to receive alerts that are relevant to them or their role within the organization. Subscriptions can also be controlled by Administrators with appropriate permissions through the web-based management console. Each subscription category can be deemed mandatory (for emergency communications) or optional (for low level notifications), allowing maximum flexibility for recipients to opt into or out of notifications through the Self-Service website.

Inbox

The BlackBerry AtHoc Self-Service Inbox displays all the alerts that have been sent to the end-user. From the Inbox end users can:

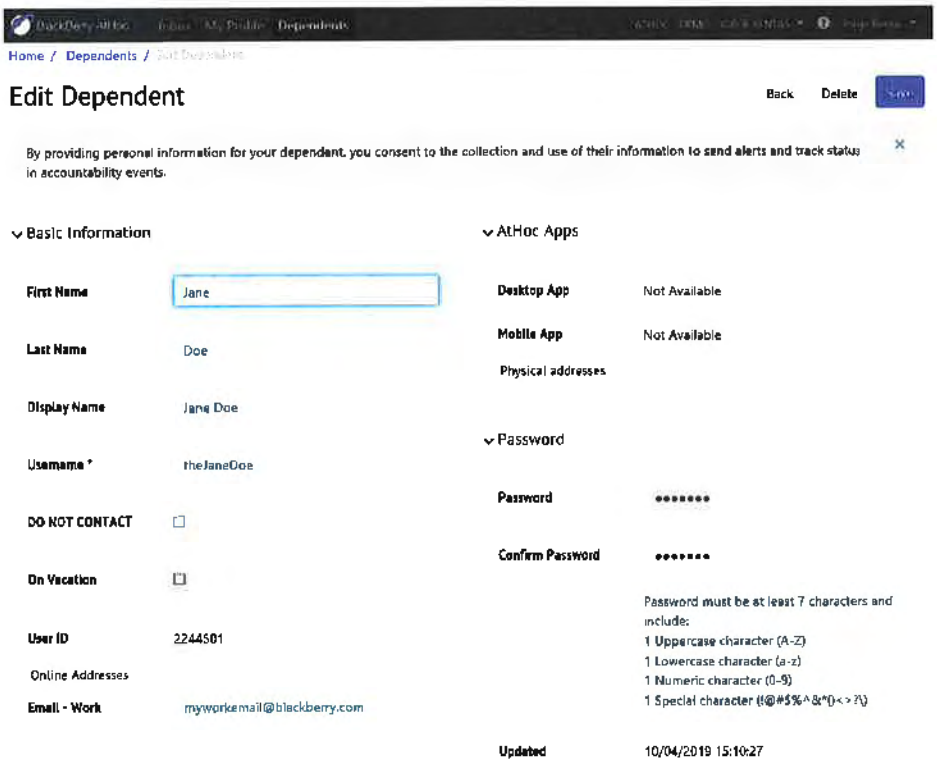
- View Alerts and events related to the user
- View details of each alert or event
- View alert location on a map
- Search and Filter the inbox for past alerts
- Respond to a live alert
- Update Status response for live Accountability Events
- Respond to live Event on behalf of dependents





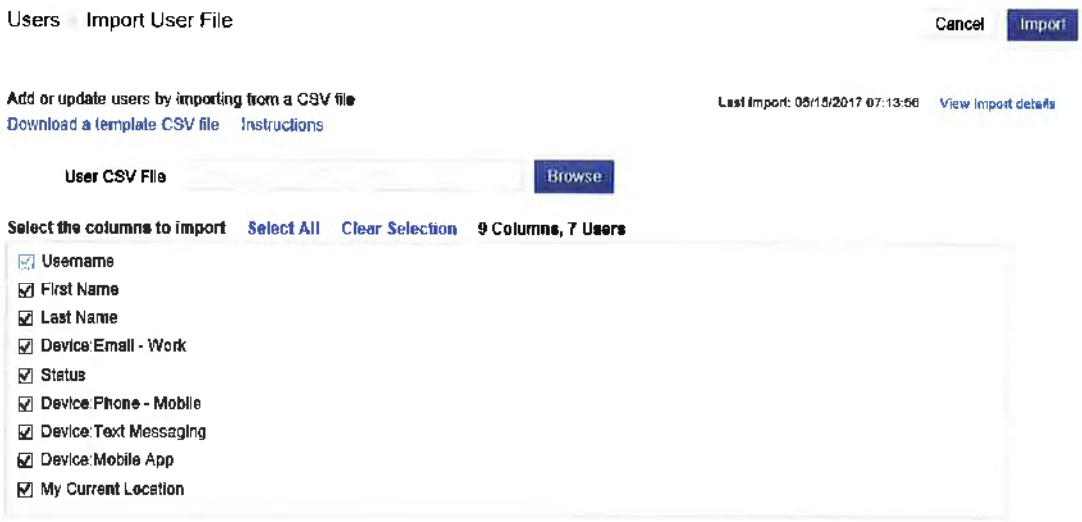
Dependents

The Dependents screen displays information related to a contact's dependents in the system and allows them to add, edit, or delete dependents.



Data Import and Export

Administrators can easily make mass changes to users in the system by exporting the user details as a .CSV file, making modifications, and subsequently importing the data into the system. When importing user details using a CSV file, the values that exist in the CSV file overwrite any existing values in the database.



Once the import process is complete, the system provides a detailed data import summary listing:

- Total number of users in the import file
- Total number of users who were processed
- Number of users who were successfully processed
- Number of users who failed to be processed
- Username of the person who imported the file
- Time and date that the file import process started and ended

Data Integration with Organizational Repositories

Options for Integrating employee/contractor data source (Active Directory):

- **Automated .CSV File Import**: Automatically upload data via a common formatted comma separated value (csv) file uploaded to a predetermined network location. This function can be scheduled or run on-demand, as required. This functionality is provided out-of-the-box with the system.
- **LDAP-based Integration**: Integration with Active Directory or other LDAP-based API interfaces using BlackBerry AtHoc's Data Integration Module.
- **API and SDK**: BlackBerry AtHoc has a robust application programming interface (API) to update end user data via a web application. The API is facilitated by a listener agent provided out-of-the-box with the Blackberry AtHoc system. Detailed documentation of the software development kit (SDK) is included with the system and available online.

BlackBerry AtHoc integrates with multiple enterprise user directories to synchronize personnel and organizational information from enterprise user directories to BlackBerry AtHoc. Common LDAP-based applications and Active Directory repositories that support LDAP v3 communications protocols are supported out-of-the-box.

As part of most implementations, the AtHoc Implementation Engineer will deploy the Personnel Data Integration Module (PDIM) that performs routine synchronization between the local resources (such as Active Directory/LDAP) and the BlackBerry AtHoc system. Generally, this synchronization is performed once nightly. All communication between the PDIM and the BlackBerry AtHoc system are via XML secured over TLS. The system also supports integration with external systems via csv file export/import and an XML-based API that uses industry standard web-services communication methods.

The User Sync Client is an out-of-the-box Windows console application which can be executed by a Windows domain user or via Windows Task Scheduler with appropriate read-only permissions to the external system. Using a configuration file, this module accesses a specified or default LDAP/Active Directory server to obtain hierarchy structure and user information, perform a transformation, and synchronize data with the BlackBerry AtHoc system through the API interface. The current version of the integration module provides the following major functions:

- Synchronizes the hierarchy structure.
- Synchronizes end users, including user basic information, user status, custom fields, device addresses and hierarchy lineage
- Synchronize the account status switch, disable users, and configure an auto-delete task to remove disabled users
- Customizable hierarchy lineage formation and value mapping
- Synchronizes only users that previously exist in the BlackBerry AtHoc, synchronizes updated users only or all users in the external system
- Synchronizes data for multiple BlackBerry AtHoc providers in one integral process
- Synchronizes end user status to disable users based on active directory which will then be subject to a configurable delete process.

The items below provide an overview of the entire process with configuration interaction:

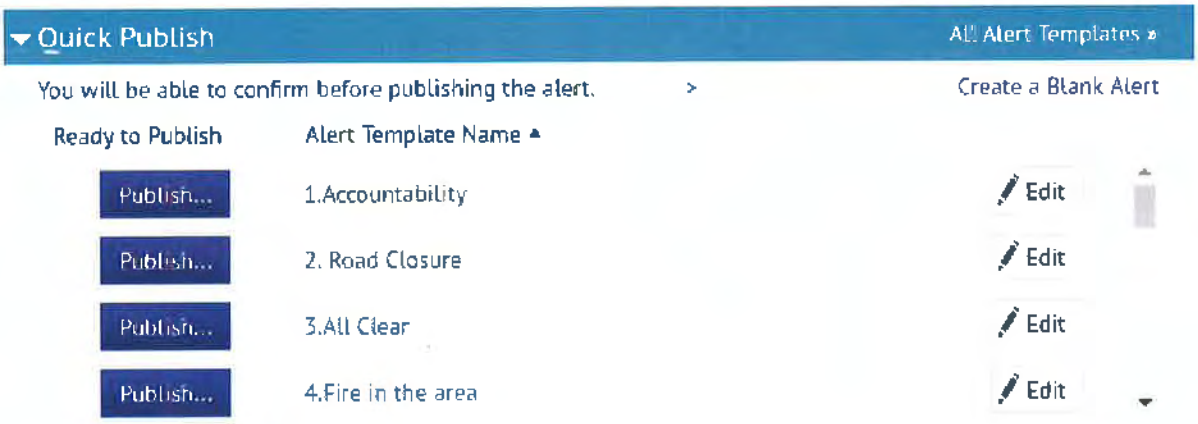
- The LDAP/AD integration module supports LDAP v3, and allows secure connection to LDAP or Active Directory services. It can be installed on the locally-implemented BlackBerry AtHoc application server(s), or on a local production server for SaaS-based customers – as long as there is network access to the personnel data repository.
- Typically, the LDAP/AD Integration Module is run on a schedule, nightly or weekly, and is configured to access the personnel data repository, traversing the Organizational Unit (OU) hierarchy to synchronize subscriber contact and attribute information.
- The synchronization configuration is controlled by a set of XPATH filters, allowing great flexibility in mapping the incoming data with BlackBerry AtHoc data structures. The configuration is done on a per-VPS basis, allowing different VPSs to synchronize with different personnel data repositories concurrently.

The User Sync Client also supports .csv files as data source. Using a .csv data source only supports synchronizing user data while using LDAP can synchronize users, hierarchies and distribution lists.

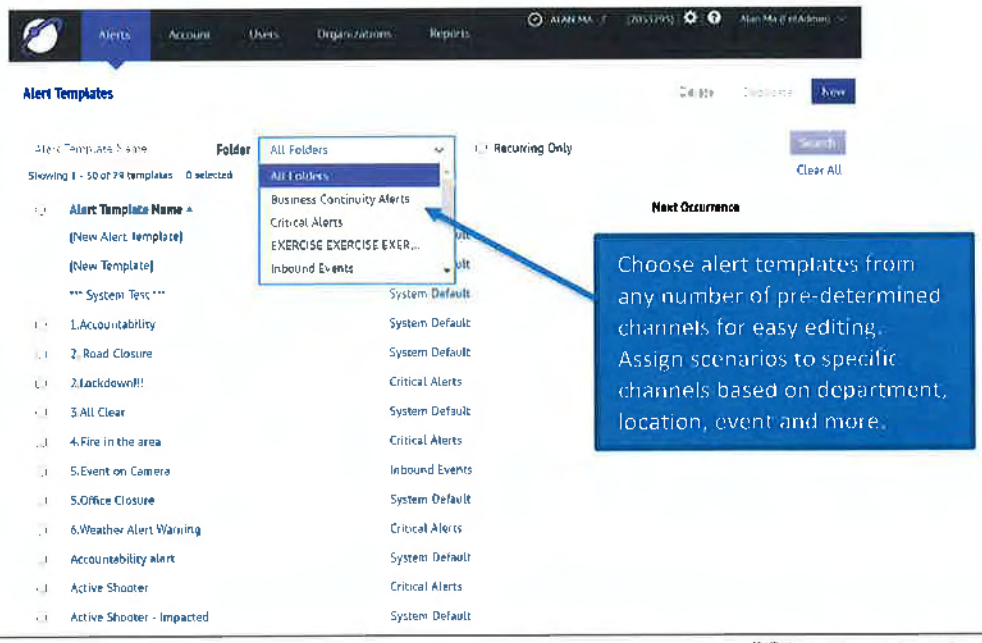
Managing Templates

BlackBerry AtHoc empowers Operators and publishers with the ability to use pre-configured templates or create on-the-fly notification templates. These Quick Publish templates are easily populated with placeholders that allow specific details of an event to be published while maintaining consistent communications guidelines.

A library of pre-configured templates is provided for a "Quick Publish" capability that, in times of crisis, allows Operators to quickly publish a notification or accountability event without the need to define the communications and targeting content each time.



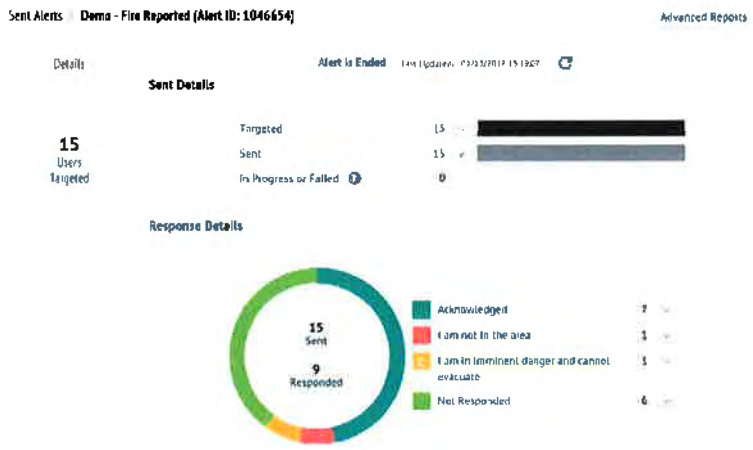
Using the Template Manager, Operators with proper permissions can create templates for every type of emergency and group them accordingly. Templates can be ready to go with just a click of a mouse and a verification review before sending. Templates can be configured to appear on the AtHoc front page for easy access and publication as Quick Publish templates.



Additional templates can be accessed through the Alert Templates screen and launched just as quickly. The system comes preloaded with a library of different templates. As part of the initial system deployment, our Account Relationship Manager and Implementation Engineers will work with the customer on the concept of operations to help tune and target the templates to the customer's needs.

Notification Tracking and Reporting

BlackBerry AtHoc supports full closed-loop, real-time tracking and response option reporting for all live and previously published notifications (alerts) in the system. As alerts are published, Operators can monitor the alert dashboard for incoming responses from the targeted user population. This gives valuable insight into which user recipients are receiving the notifications successfully and how they are responding (e.g. response option selection and device modality), allowing Emergency Managers to make educated decisions when managing the direction of response to an event. This capability is of paramount importance when situations require accountability reporting for personnel.



In our support of real-time delivery, receipt and response option tracking, we provide Operators with both aggregated overview summaries as well as detailed delivery information for each recipient.

These reports provide visibility and 100% accountability into user readiness as required and includes the ability to authorize and segregate Operators to view closed-loop, two-way alert and response reports. Operators are one click away from an Event Summary screen on the Management Console home page that shows the status of all ongoing notification events within the system. Additionally, from any summary report, Operators may publish new alerts to select recipients, based on previous response option groups that were selected (or no response) for follow-up notification. For example, an Operator can send a follow-up alert to just those recipients that responded with "I need more help".

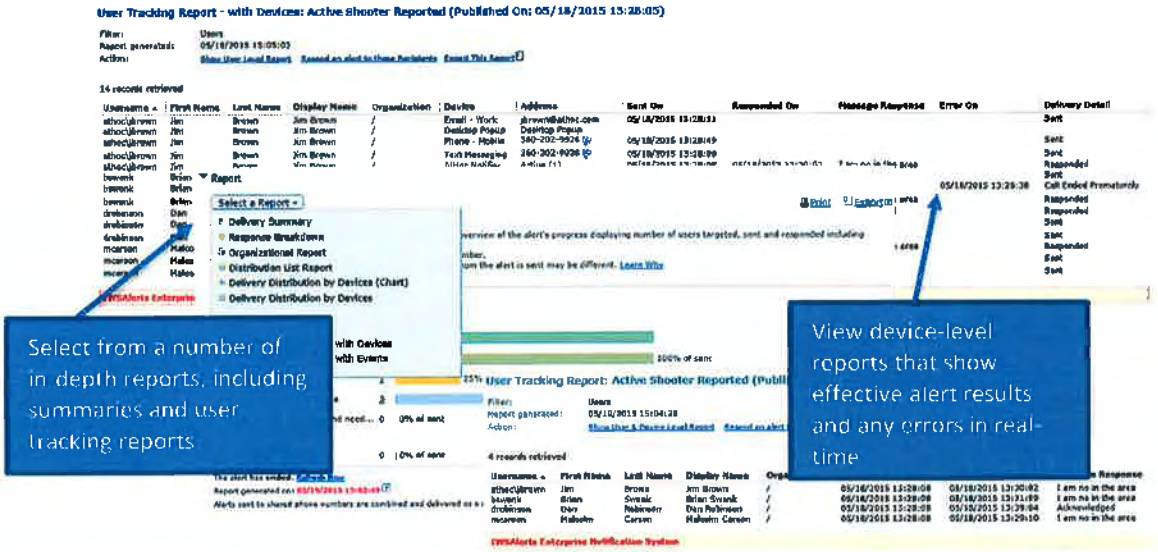
Organizational Reporting

The Organizational Reporting capabilities built into BlackBerry AtHoc allow user-selectable reporting of individual departments, facilities and groups. Operators can drill down into reports for microscopic visibility and confirmation of the response options selected by recipients throughout the organization. All Tracking Reports can be printed directly from the management interface or exported into .csv format.

This capability allows Operators and Administrators a common view of current, ongoing accountability events, and allows the generation of ad hoc reports including built-in template reports including the following:

- Delivery Summary
- Organizational Hierarchy

- User tracking by Device or Event
- Response Breakdown
- Delivery Distribution by Devices (chart or table)



Reports can be generated based on selection of user criteria or attributes assigned within the system, such as recipient job role, geographic area, work location or facility. Results on pre-defined or custom reports can be sorted by any user attribute contained in the report, such as Facility, professional role or any others deemed necessary by the Operator. Additionally, reports can be customized to show only user data from specific facilities or globally across the enterprise.

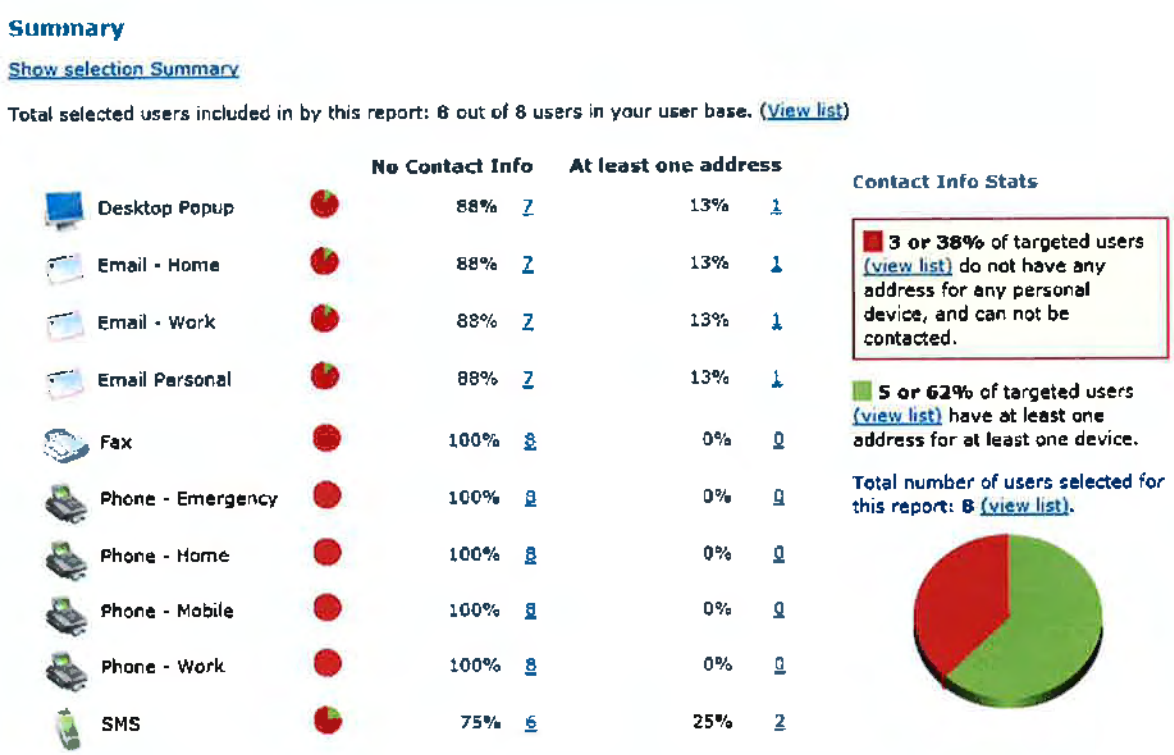
Reports that contain alert content, targeted device info and scheduling options can also be exported to a file or printed directly from the browser. This report information provides insight into accountability status and detailed information for leaders to execute analytics on exported data.

BlackBerry AtHoc also features the following response tracking, reporting and archiving options:

- Distribution lists: detailed real-time table diagram analysis for total sent and received, including acknowledgements and specific response options. Each distribution list can be converted into a list of individual members by a specific response option.
- Reports can be automatically archived for Operator-defined timeframe or rules-based.
- Response tracking reported in real-time XML format or converted to spreadsheet.
- Provide reports that summarize units, individual personnel accountability, and informational status.
- Ability to create reports based on dynamic date query ranges.
- All tracking reports include time-stamp information showing when the notification was sent and when an acknowledgment or response was recorded in the system. Other reports show success/failure rates as a cumulative number or as a percentage of the notified population.
- For Enterprise systems - Enterprise Alerts Usage Summary Report shows the number of notifications and messages by recipient over a designated period for different Virtual Private Systems.
- For Enterprise systems - Enterprise End User Summary Reports show the number of enabled users across multiple virtual systems.

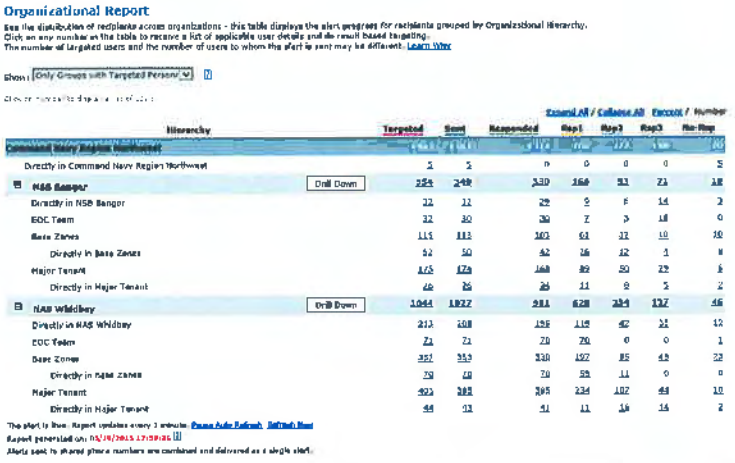
Coverage Reporting

From the Operator's perspective, complete coverage is crucial for the success of the notification delivery and, as a Unified Notification platform, there is more than one way to reach out to users; therefore, it is important to assess coverage of users across multiple delivery devices.



The system includes a unique set of reports allowing Operators to analyze the data coverage of user contact information across all or some personal communication devices (such as email addresses, phone numbers, SMS addresses and more), and to ensure that the user repository has adequate contact data to reach all recipients during a critical situation.

The device coverage report allows an operator to view a summary across all or some delivery devices or select a subset of users using a query or by organizational hierarchy. The report shows a breakdown of device contact data available and unavailable. The reporting services allow an operator to drill down to the individual user level, format the report for printing and export the report data to a spreadsheet for further analysis.



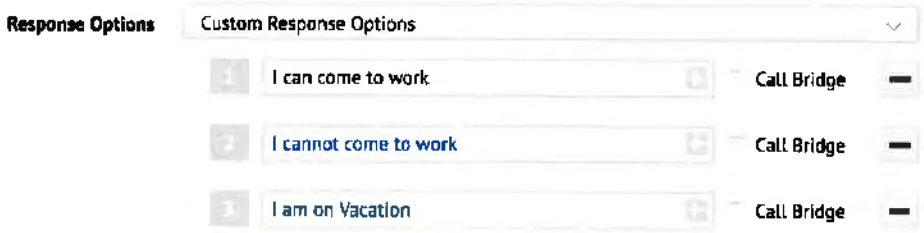
The summary view shows graphically and numerically the coverage per personal delivery device, as well as aggregate summary data showing total reach of users. The Operator can drill down to the individual user level and export the list to Excel spreadsheet, PDF or print directly, so users can be contacted and asked to fill in their missing contact details.

Additionally, reports that contain alert content, targeting devices and scheduling options can also be exported to file or printed directly. Reports can be generated based on selecting user criteria or attributes assigned within the system, such as physician role, clinical area, location or facility. Results on pre-defined or custom reports can be sorted by any user attribute contained in the report, such as By City, by Zip Code, by Professional Role or others as deemed necessary by the Operator. Additionally, reports can be customized to show only residents' data from specific city or globally across the enterprise.

On call Scheduling and Messaging

Personnel Status and Availability

BlackBerry AtHoc delivers unprecedented real-time visibility into the status and location of all your personnel, ensuring effective crisis response, regulatory compliance, and availability.



Organizational leadership or an operations center can use the system to request safety status in an alert from the targeted population of users before, during, and after an event. The application captures map-based views as well as detailed reports across the enterprise. Sites that have deployed AtHoc Collect can get additional unsolicited reports of user status, availability and location as well as photos and video from the AtHoc mobile application.

Key Features and Benefits:

- Personnel status for safety & compliance
  - Personnel accountability process initiation and management at every level – enterprise to facility
  - Aggregate personal status from multiple sources
  - Operator multi-personnel status entry
  - Proactive alerts to solicit status
  - Capture personnel status from individuals
  - View real-time personnel status reports
  - Target specific groups for follow up based on status
- Location and status tracking on a map for targeted crisis response
  - Capture location information in real time from each person, "track me"
  - View personnel geo location worldwide
  - Filter personnel viewed based on status
  - Track emergency team and key personnel

- Integration with mass communication devices leverages multiple channels for redundant reach
  - All communication channels and devices supported, e.g. desktop, mobile/smartphones, IP phones, SMS text, email

Fill Count and Escalation

BlackBerry AtHoc supports multiple response options in an alert and provides operators the option to specify a Fill Count (quota) to reach a specific number of users based upon a specified response. For example, the Operator can specify that an alert be sent out a group of users and that requires one person reply with "Available" as a response to fulfil the request. Once the first person responds as "Available", the system will end delivery. With the escalation option selected, after a defined time, if the fill count is not met, then the system will automatically escalate to a management group or other groups to handle the situation, even by using seniority to determine who is sent the alert first.

User Administration

Application Setup/Central Administration Overview

The BlackBerry AtHoc solution provides for a comprehensive set of user and management tools that allow for granular administration, control and management of Users and Groups. User management includes system-provided attributes as well as unlimited custom attributes and permissions on a per-user basis. Summaries of group and user management capabilities are provided below.

System Administration Rights and Privileges

The management application for alert activation, administration and management requires authentication using username and password. Only authenticated users are able to login to the alert activation and administration application.

BlackBerry AtHoc supports SAML 2.0-based Single Sign-On enterprise authentication methods, as well as DoD Common Access Card (CAC) authentication and access. CAC and PIV authentication are provided with use of the Electronic Data Interchange Personal Identifier (EDIPI) for authentication either directly from the CAC client PKI certificate or from the CAC logged in on the computer. Designated central administrators can define permissions to other users (Operators) specifying their rights and privileges. The authentication and password protection comply with DoD Password Policies.

Administration with Role-Based Access Control (RBAC)

Underlying BlackBerry AtHoc's Alerts Management System is a common framework of role-based Operator permission management. This framework uses a role-based permission definition, where every role is composed of objects and allowed actions (view, create/modify, publish). An operator is associated with a role in the context of a specific Virtual Private System (VPS) or multiple VPSs.

When an Operator logs into the Management System, it is always in the context of a specific VPS configuration for a specific organization. The permission framework determines the permissions allowed for the Operator based on their associated roles and provides access only to those objects and actions. This design enables delegated administration (e.g. Need to Know) for different administrators in the organization.

Operators can be associated with multiple VPS configurations. Switching between VPS configurations for a logged-in Operator is limited only to the VPS configurations that are associated with the Operator and does not require logout and login each time. The permission system provides control over operator permissions, limiting permission control only to specific operators, as dictated by the VPS configuration.

The Role and Permission framework provides additional level of control over operator permissions via:

- **Operator User-Based Permissions**, limiting access to the user population that an operator is exposed to via organizational structure or dynamic user attributes; this capability allows operators to be limited to a restricted user base so they can target only the end users in their user base. Users can be alerted by a certain operator for a specific department or with a specific role, providing granular control over which users an Operator can send alerts to.
- **Distribution Lists Permissions**, allowing control over what distribution lists are available for view, publish, or management by operator.
- **Alert Categories Permissions**, limiting access of certain operators to specific alert categories; for example, only be able to publish traffic alerts.

Available administrator roles allow unrestricted access (system-wide or from a VPS level) to all functionality, users, and reports. These robust permissions and roles capabilities ensure complete control over what each Operator can see and activate in their systems, as well as full control over all sensitive Personally identifiable information (PII) data. Once implemented, no BlackBerry AtHoc personnel will have access to the system or the PII data it contains unless granted by **State of Nebraska** administrators (i.e., help desk support and system administrative support, etc.).

BlackBerry AtHoc supports the following roles:

- Accountability Manager
- Accountability Officer
- Activity Log Manager
- Activity Log Viewer
- Advanced Alert Manager
- Alert Publisher
- Connect Agreement Manager
- Dist. Lists Manager
- Download Export File
- Draft Alert Creator
- End Users Manager
- Enterprise Admin
- Organization Admin
- Report Manager
- SDK User
- SSA Operator
- SSA Viewer
- System Admin

Enterprise and System Administrators are assigned complete access and visibility into all activity, reports and users, and can audit operator access to any system function. Policy management capabilities support the ability to define access permissions according to multiple dimensions, including access to certain end-users, events, location, groups, and notification scenarios by organizational unit.

Administration

BlackBerry AtHoc features built-in robust security controls that support a centralized deployment with multi-tenant capability. This support of logical segmentation between multiple organizational units is based on permissions and access rights. This separation includes management of administrators/operators, end-users, LDAP/Active Directory integration, organizational hierarchy, distribution list scenarios, targeting, organizational hierarchies, alerts, system parameters, devices and telephony systems.

Administrator permissions and access management tools limit the rights to alert and manage a specific unit, including its end-users/recipients and all other parameters. System Administrators are assigned complete access and visibility from HQ into all system units to view alert activity, reports and users, and are permitted to audit Operator access to any system function. Policy management capabilities support the ability to define access permissions with multiple dimensions, including access to specific end-users and notification scenarios.

Alert Publishers, Managers and Operators

Administrator permissions and access management tools limit the rights to alert and manage a specific unit, including its end-users/recipients and all other parameters. System Administrators are assigned complete access and visibility from HQ into all system units to view alert activity, reports and users, and can audit operator access to any system function. Policy management capabilities support the ability to define access permissions according to multiple dimensions, including access to certain end-users and notification scenarios.

Operators assigned the proper roles use the web-based UI to publish and track alerts and perform administrative activities, such as manage end-users, delivery devices and templates. Operators ability to perform certain administrative tasks is defined by the roles assigned to the Operator.

Operators are authenticated to the web-based UI using username and strong password implemented system password policy rules, or via integration to single sign on or CAC and PIV authentication when implemented. Operators will be logged out by a Web based session time-out after the designated time period and cannot be re-initialized without positive re-authentication.

Users (Alert Recipients)

Users can use the web-based self-service module to view notifications, view and update personal attributes and contact details and the contact details for any dependents if they have added dependents to the system (if enabled on system).

Dependents (Alert Recipients)

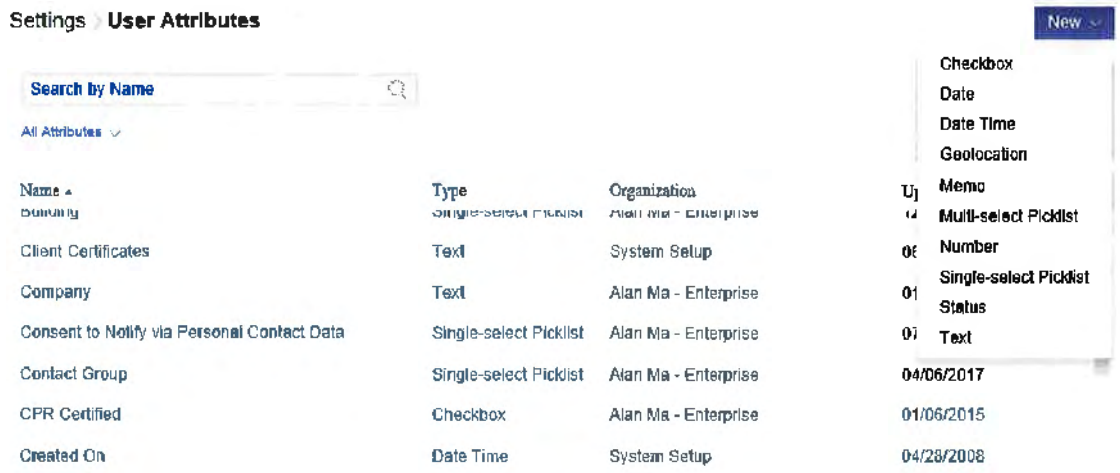
A dependent is a sub account of a user account such that family members of a user can receive alerts when they do. This allows users with dependents to add a dependent account for anyone who is their responsibility and does not have an account in the system.

Users with dependents can add and manage dependent information for family members or anyone that should receive alerts when they do by using the self-service interface.

Operators have the option to include / not include dependents when sending out an alert or requesting accountability status. If a dependent does not respond to an accountability event, the user may be requested to provide their status through the Inbox.

Custom Attributes

BlackBerry AtHoc supports an unlimited number of custom user attributes. User attributes provide powerful ways to organize, filter, and sort users, enabling Operators to manage and target users using any combination of associated attributes along with name, role, location, distribution list membership or organization.



Data Access Provisioning

The management application for alert activation, administration and management requires authentication using username and password. Only authenticated users can login to the alert activation and administration application. Designated central administrators can grant permissions to other users (Operators) specifying their rights and privileges.

Users are authenticated to the web-based UI using username and strong password as configured in the BlackBerry AtHoc system password policy rules; BlackBerry AtHoc supports configuration to authenticate via CAC, Federal PIV or Active Directory authentication methods through SAML 2.0 SSO. Additionally, numerous access controls are built into the product to limit data access as follows:

- Granular permissions and access rights, which can be configured for each individual Operator to determine; who can view user contact data, who can modify/update user contact data. For example, an Alert Publisher may not be permitted to view subscriber contact data but could be permitted to target alerts to subscribers based on certain criteria.
- User-based permissions can be configured for each individual Operator to determine the audience they have access to, possibly as a subset of the organizational hierarchy, or by user fields. For example, an Operator in a department or building may only have access to subscribers within their area of responsibility such as a single building or the IT department.
- Database access, which is only accessible through the application itself, pertaining to the above permission configuration.

Password Management

BlackBerry AtHoc supports Department of Defense (DoD) Password Management Guidelines CSC-STD-002-85, and specifically provides:

- Control over password complexity parameters (minimal length, character combinations)
- Prevention of re-use of previous passwords
- The ability to monitor and show failed logins and lock accounts
- Support for password and account expiration

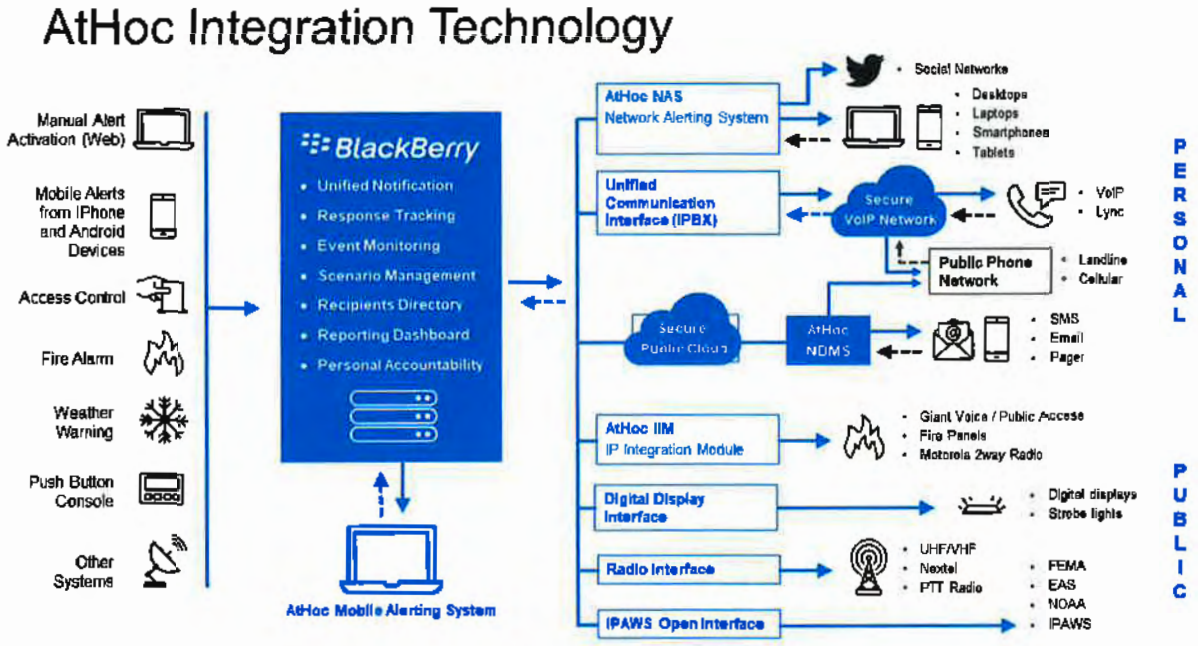
All password management features are easily available and manageable within the BlackBerry AtHoc Management Console.

Full Integration, Event Monitoring, and System Interoperability

A great deal can go wrong in a crisis. It is therefore imperative that employees and first responders receive an accurate, real-time picture of an emerging crisis. Often, the safety manager would have to travel to the site of the disaster and verify its severity. At that point, it is far from an efficient system – the delays introduced by verification alone meant that even a minor crisis could easily spiral out of control.

Emergency alerts are often triggered by physical sensors (e.g., fire alarms, video surveillance and chemical detectors) or other external inputs (e.g., Panic Buttons, Weather Service feeds, etc.). BlackBerry AtHoc can monitor such events and, using preconfigured business rules, automatically activate the appropriate emergency scenario. By utilizing Common Alerting Protocol (CAP), XML, RSS, Atom, and web services, BlackBerry AtHoc also enables communication with external systems, such as federal, state and local agencies for information sharing and interoperability.

The system architecture depicted below creates a fully integrated mass notification and communications system for emergency and non-emergency use:



BlackBerry AtHoc supports the following integration types:

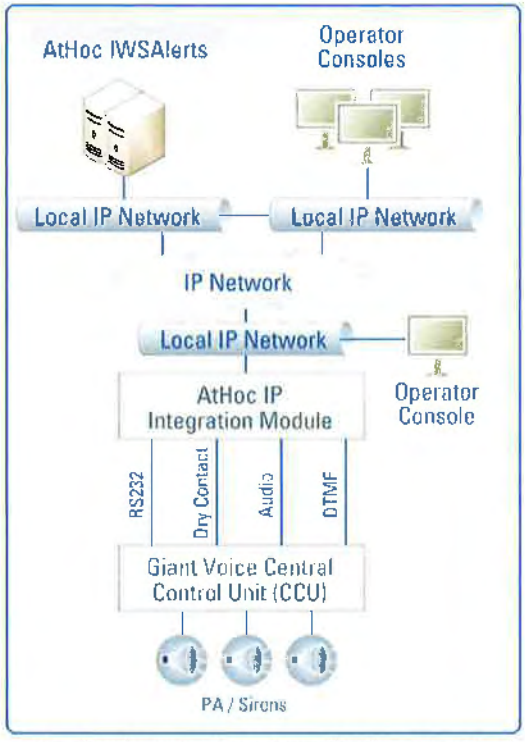
- **CATV:** Community Access Television/Cable TV. A system of TVs in a campus that are all driven from a single video source (typically a type of headend).
- **Fire Panel:** A fire marshal-approved panel that can be triggered to create a public address system notification to bystanders in the building.
- **GV:** Giant Voice. Also known as an outdoor siren system.
- **Inbound:** A system that feeds BlackBerry AtHoc with events.
- **Integrator:** A custom system or device that typically activates many types of warning devices, such as public address (PA), fire panels/alarms, and indoor and outdoor sirens.
- **IP Messaging:** A TCP IP system that uses an existing LAN connection to relay messages that include both text and audio from one IP device (a PC) to another IP device (a Cisco Phone).
- **LMR:** Land Mobile Radio (portable radio).
- **PA:** Public Address System.
- **Pager:** An alphanumeric pager device.
- **Radio Broadcast:** A device that generates radio signals that can be picked up by a common radio receiver, such as the one that comes standard in a basic audio package of a car.
- **Signage:** A device that is typically indoor and hung on a wall and generates a combination of light, sound, video, and text for all bystanders to see when an alert is active.

Integration with Legacy (non-networked) Systems using BlackBerry AtHoc's IP Integration Module (IIM)

Many of the existing and common delivery systems used by BlackBerry AtHoc customers are not network-aware, and do not provide IP based APIs for integration with their systems; such systems may include fire alarms, indoor and outdoor PA systems, radio stations, TV broadcast stations and others. These systems may provide non-IP based integration schemes, such as using dry contacts (relays), audio input and serial (RS-232/485).

BlackBerry AtHoc developed an innovative solution for integration with legacy non-IP delivery systems: The *BlackBerry AtHoc IP Integration Module* (IIM).

The security-certified IIM is delivered as a black-box network appliance, connecting with non-networked legacy device and "IP-enabling" them for unified notification activation. This way, BlackBerry AtHoc is leveraging existing legacy alerting systems, and making them an integral extension of the network centric Unified Notification interaction flow: operators can activate these systems side by side with modern notification systems, in the same alert activation, while specifying device specific delivery options; for example, target specific outdoor speaker poles in a target geographical zone.



The IIM interfaces with BlackBerry AtHoc via the international standard CAP protocol (XML over HTTPS), and is connected with the legacy delivery system using non-IP technologies, such as RS-232, dry-contacts (relays), audio in and DTMF. As such, the IIM is typically installed near the legacy system console (e.g. near the GV control unit in the ops center), to allow physical connection.

The IIM includes an integral Text-To-Speech (TTS) component, allowing one to automatically convert a text message to voice message to be delivered over the legacy system voice channels (for example, over AM Radio broadcast station, or outdoor speakers). Alternatively, the IIM can deliver a pre-recorded audio message, or activate a pre-configured audio tone installed in the legacy alerting system.

Supported legacy systems include, but not limited to –

- Outdoor PA ("Giant Voice") and indoor PA systems
- Mobile Radio Systems (LMR, Tetra, CB, etc.)
- Television text/scroller
- Digital Signage
- AM Radio broadcast
- Strobe lights or Beacons
- Fire Panel and Alarm system

The IIM is highly configurable and can be extended to support additional non-IP enabled devices and systems via its in-system interfaces, and by leveraging the legacy system integration APIs.
The following picture shows the physical IIM black-box:

Front & back of AtHoc IP Integration Module (IIM)

Integration with Enterprise Systems

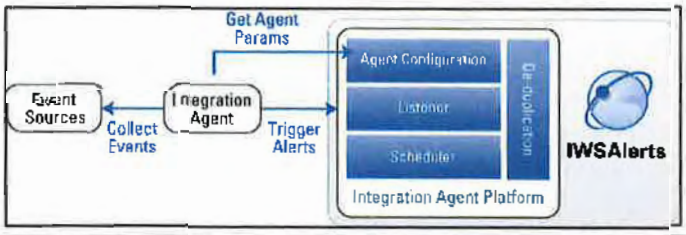
Application Programming Interface (API) Integration
BlackBerry AtHoc provides a suite of portable HTTPS and XML-based APIs to facilitate integration of the BlackBerry AtHoc system with external systems, and provides content synchronization, group and distribution list synchronization, and publishing of alerts. All API access is security controlled via positive authentication and can be further restricted by source IP.

The AtHoc SDK APIs are based on XML over HTTPS. The two main methods to use the API are:

- By HTTPS POSTing the XML document to AtHoc SDK listener. This method allows sending several API requests (payloads) in one XML document by wrapping the different requests in an SDK envelope. The SDK envelope contains authentication and identification parameters for the SDK request(s).
- In some cases, BlackBerry AtHoc can be configured to pull the data from a configured URL. The pulling context determines the expected data format, and only the payload needs to be transferred from the data source.

The integration API covers the following integration functions –

- Personnel data synchronization for user profile updates
- Alert and scenario activation
- Alert content retrieval
- Alert tracking and reporting retrieval
- Subscription updates
- Distribution list updates
- Local configuration



BlackBerry AtHoc XML-Based API

Supported systems include, but not limited to –

- Internet of Things (IoT) – physical devices, sensors
- Enterprise of Things (EoT) – IT Systems, Incident Management Systems, HR, Travel Systems
- Mass Communication Systems – Sirens, Fire Panels, IPAWS

Cisco and Avaya IP Phone Blast Integration

BlackBerry AtHoc supports Cisco and Avaya integrations, providing an IP based phone blast notification. This integrated solution includes both rapidly delivery of TTS audio notifications and subscriber responses by initiating dial-out voice telephony notifications to IP Phones and connected phone networks such as an on-premise voice system as provisioned by the IP Phone Call Manager. All notification responses are fully tracked and reported as with BlackBerry Cloud Delivery Services. Upon completion of notification delivery, the system NDS anonymizes all PII information such that access to the NDS system does not provide the ability to associate information with a subscriber.

AtHoc IP Phone Blast is used for displaying alert messages on an IP phone's display panel by using the phone's internal HTTP server. These messages include optional images, response options, streamed audio, and designated ringtones. If the alert requires a response, the recipient can press the Response option on the screen to view a list of response options. After selecting a response option from the list, the screen displays a "Response sent" confirmation message.

Microsoft Lync Integration

BlackBerry AtHoc is a Microsoft certified vendor providing an alerting capability integrating Microsoft Lync/Skype for Business to support instant messaging as well as leveraging Microsoft's strong collaboration capabilities for online collaboration between notification recipients. All alert responses are fully tracked and reported in a consolidated reporting.

BlackBerry Messenger Enterprise – BBME

BlackBerry AtHoc has integration in to BBME to allow customers to alert directly into the BBME App as well as directly respond to a notification from within the BBME app. This allows users to then use the BBME instant messaging to allow collaboration between notification recipients. All alert responses are fully tracked and reported in a consolidated reporting. BBME is available on IOS, Android, Windows 10 desktop and Mac OS.

ServiceNow Integration

The BlackBerry AtHoc ServiceNow integration enables IT administrators to share critical information about high-priority IT outages across their organization using multiple notification modalities, leading to a quicker time for responding to and fixing issues. It provides an easy way for BlackBerry AtHoc alerts to be generated for ServiceNow incidents within ServiceNow operator console.

The BlackBerry AtHoc ServiceNow integration streamlines the IT service notification with the following capabilities:

- A single interface to manage IT issues and notify users, all within the ServiceNow console
  - Publish an alert from ServiceNow to users or groups directly from within an incident
  - View alert tracking details
- Multiple messaging modalities promote faster collaboration.
- Outages can be resolved more quickly and efficiently.
- Logging of alerts published under one ServiceNow incident.

Key Benefits for Support Staff:

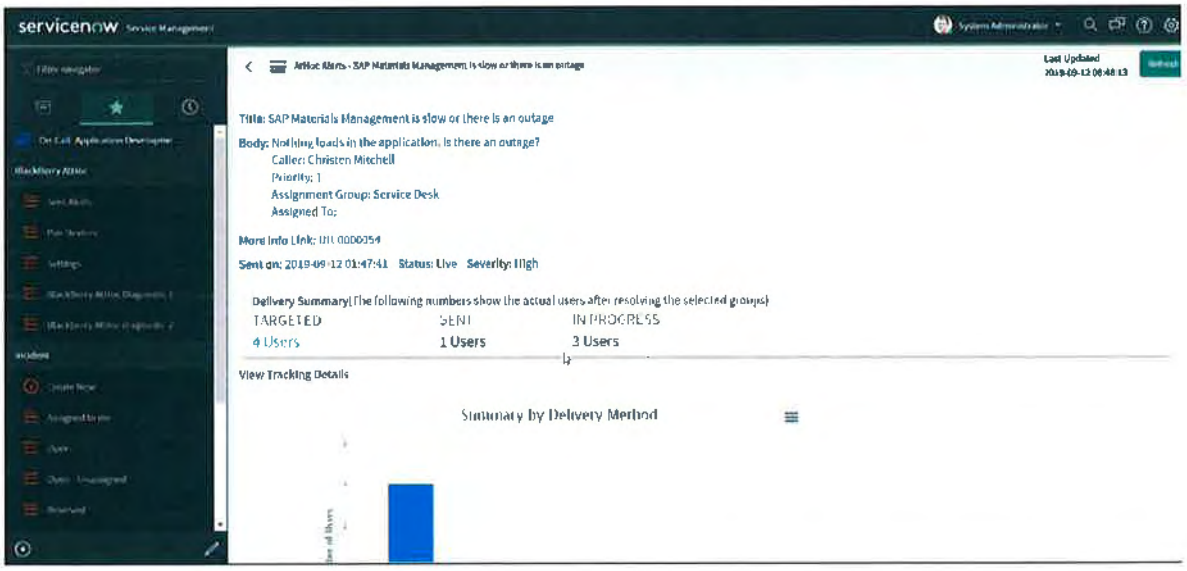
- Easily identify who best suited people are to work on a particular issue-based groups of users or skills
- Engage with specialist IT teams without having to manually contact people
- Notify key stakeholders and impacted users and keep them updated with targeted notifications

Key Benefits for IT Responders:

- Receive targeted notifications when you are absolutely required
- Acknowledge alert directly form notifications
- Escalate automatically in case people don't respond quickly enough

Key Benefits for Senior Management/Leaders:

- Gain visibility into the state of incidents across different areas of the business
- Gain visibility into response team performance, such as response times
- Continuously Improve IT response performance and accountability over time in line with best practice
- Keep employees, external customers and partners informed
- Full audit-trail of the incident resolution process for compliance and Incident Management processes



BlackBerry UEM Integration

With BlackBerry UEM Notifications, UEM administrators can message users via SMS, phone, and email directly from the UEM console. This add-on simplifies communications to end users and user groups by

eliminating the need for additional messaging solutions. BlackBerry UEM Notifications cuts through the clutter of everyday messages, resulting in more users taking actions.

BlackBerry UEM Notifications provides the following key capabilities:

- Leverage UEM for simplified communication, single console for notifying your AD users or Mobile work force.
- Multiple delivery methods (text, phone, and email)
- Increased engagement from users
- Ability to filter users via UEM filters, for example type of mobile device used

Unify communication processes and tools for improved productivity

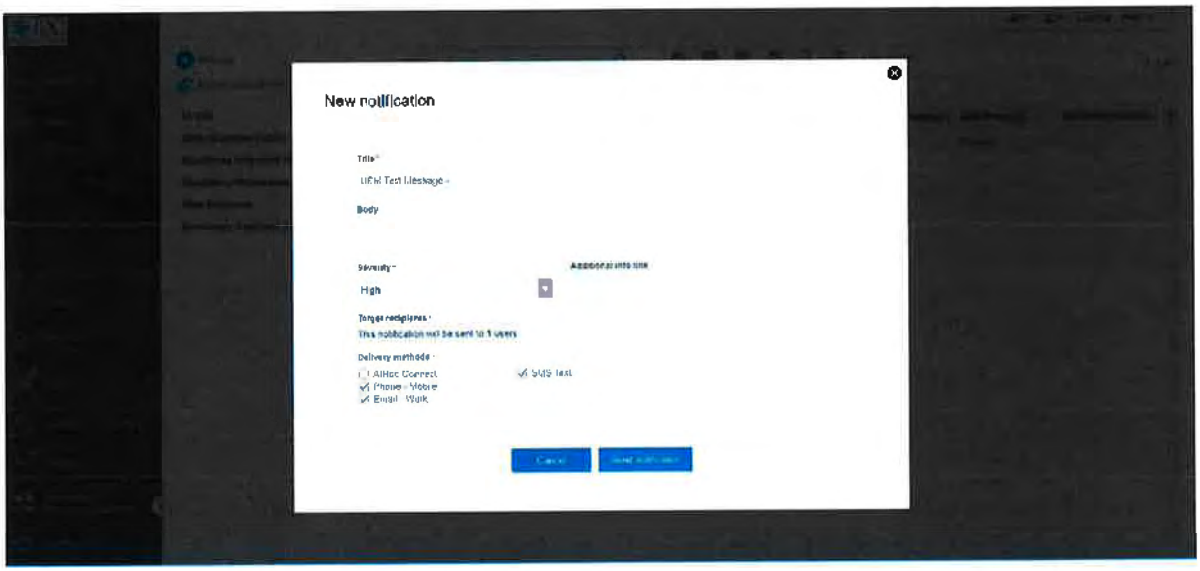
- Take control of user messaging: Effective device management requires UEM administrators to communicate with the users they manage. With UEM Notifications, administrators can manage devices and notifications within their UEM, eliminating the need to manage and reconcile user contact information across multiple systems as well as external system access issues. Managing user messaging from a single solution empowers administrators with more control and improves their productivity.
- Replace email blasts with messages that users will actually read: When email is used as the main tool to notify users, messages can easily get lost, overlooked, or ignored, reducing their effectiveness. This leads to increased support calls, raising your costs and hampering productivity. With flexible delivery options such as Text-To-Speech voice calls, SMS, and email, employees get alerts via their preferred channel, increasing the likelihood of action and compliance.
- Trust that users will receive and view your notifications: Common communications channels lack an easy way to track and store the status and history of messages, forcing administrators to reconcile against external notification systems. With UEM Notifications' FedRAMP-authorized delivery services, you can rest easy knowing the messages sent reach their intended destination. UEM Notifications features a comprehensive report of all sent messages and their statuses.

Simplify notifications to users

- Single interface for messaging users and managing devices: This "single pane of glass" approach eliminates confusion and streamlines two functions: managing devices and notifying users of important announcements.
- Mobile device information identifies which users are affected: UEM Notifications leverages information collected from mobile devices to identify the specific users who need a given notification. This means there is less noise for the user, because each notification is relevant to them. This targeted approach means that users always know that the alerts they receive are reliable.
- Improved end-to-end message workflow: Administrators can test and review messages before sending them broadly to ensure accuracy.
- Active Directory sync streamlines user data: Your company's active directory contains all user data, including telephony, email, and user groups. UEM Notifications leverages contact information via an active directory sync to ensure notifications reach your users.
- Supports text-to-speech (phone), email, and SMS notifications: Multiple delivery options enable UEM administrators to choose which methods are best for each type of message.
- View message details and history: Track and manage notifications sent including detailed message status by delivery method.

Common use cases

- Planned downtime: Inform affected users of scheduled upgrades and outages ahead of time.
- Manage email outages: Let affected users know an unexpected outage has occurred and provide an anticipated timeline for the issue to be resolved. This can help you avoid support line flooding.
- Compliance warning: Alert users to upgrade their software in order to comply with corporate policies and external regulations.



Integration with National Weather Service (NWS)

BlackBerry AtHoc's Integrated Weather Alerts (IWA) module tracks NWS for weather that meets an emergency manager's predetermined definition of a threat. For example, the emergency alert system can be programmed to only alert emergency managers when hurricanes reach a pre-specified category status, or when snow fall is expected to exceed a certain number of inches in a region close to the area.

Here are five features about IWA:

1. **The IWA module automatically activates alerts to affected users.**

Operators don't always have time to manually send out alerts in the midst of a severe storm, wildfire, or hurricane. That's why IWA can automatically trigger alert templates based on the feed content included such as:

- Feed expiration time
- Instructions
- Detailed description
- Ability to insert custom actions based on templates as well

It's no longer on the emergency manager or operator to check the weather and make a judgment call. The BlackBerry AtHoc solution will trigger an alert template as soon as the NWS deems that the weather conditions warrant it. You set the criteria for the types of weather events that qualify as emergencies, because you know your organization's needs best of all. The system then automatically monitors events and alerts personnel when the criteria are met. If you want to ignore everything but hurricanes or high severity events, the system will do that.

2. With IWAs, you can target relevant users in a specific geographic location.

Down to the neighborhood, the NWS integration means you can send messages to users in a specific location. If a natural disaster will have more severe ramifications in certain areas, you'll be able to seamlessly send personalized communications to that area. This feature saves you from raising panic in non-affected areas, while still collaborating with areas that need help.

3. The NWS is working 24/7 on your behalf with IWA.

The NWS is the weather expert - it has the latest information on tornadoes, dust storms, flooding, and other disasters. By integrating with the Blackberry AtHoc suite of products, IWAs become your organization's

own personal meteorologist. You'll receive critical warnings and forecasts, so you don't have to remember to check the weather or decode complicated meteorology statistics and data.

4. You create your own rules with the IWA module.
You can personalize your organization's alert templates so that they're as effective as possible. You can include information on content, targeting, maps, applicable devices, and more. You can set your alert template to activate, or to override map flags from the NWS feed. You can also create the scope for when your alerts will be triggered, as well as the message type. You have more control with IWA integration, when you can choose what to ignore and what to flag.

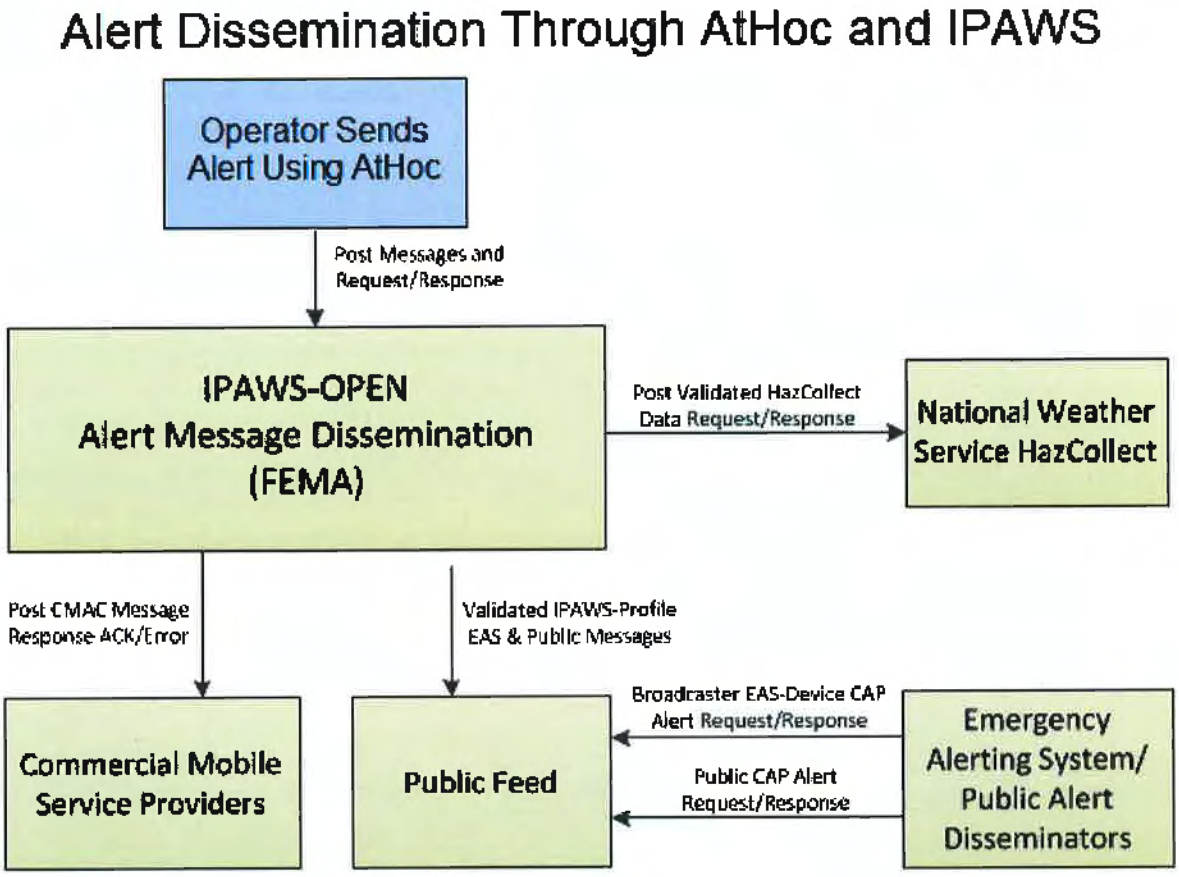
5. IWAs aren't technically complicated.
Even though IWAs have cloud-scalable integration, they don't require setup from an AtHoc engineer. If you're a system admin, you can set up IWAs and create alert templates. There are no complicated technical steps or permissions needed. You'll still receive the increased accuracy, quick alert delivery, and ability to receive events during off-duty hours.

Integration with Public Alert & Warning System (IPAWS) Integration
BlackBerry AtHoc Alerts fully supports IPAWS integration for activation of IPAWS enabled mass notification devices (EAS, WEA/CMAS and NWEM / HazCollect) as well as interoperability with local jurisdictions and agencies that leverage IPAWS compliant systems via IPAWS COG-to-COG/CAP Exchange functionality.

IPAWS-OPEN, being the federal gateway to WEA (CMAS), EAS and NOAA HazCollect, can be used to disseminate messages to the local populace in case of emergency requiring their attention and awareness. Organizations will be capable of publishing and subscribing (and consuming messages) to/from the relevant Collaborative Operation Groups (COGs), as mandated by FEMA.

IPAWS-OPEN supports multi-jurisdictional and joint interoperability between external organizations and Commonwealth via CAP Exchange features. Once information is passed from COG-to-COG via this interface the emergency managers can act upon the information provided. This feature supports the interface between multiple emergency management systems used by different jurisdictions and on different domains: local, state, federal, and even commercial entities (such as adjacent power plants and other utilities).

- National Emergency Alert System (EAS) – Delivery of EAS alerts via Common Alerting Protocol via IPAWS-OPEN
- NWEM NOAA HazCollect – Delivery of text-based alerts through the NOAA transmitters via IPAWS-OPEN
- Wireless Emergency Alerts (WEA)/Commercial Mobile Alerts System (CMAS) – Delivery of text-based alerts to FEMA/carrier compatible cellular phones via IPAWS-OPEN
- COG-to-COG - Interoperability with external agencies via IPAWS COG-to-COG CAP Exchange and the AtHoc Mobile application.
- The BlackBerry AtHoc IPAWS plug-in provides support for sending alerts from one Collaborative Operating Group (COG) to other COGs and to public alerting systems such as the Emergency Alert System (EAM), and Wireless Emergency Alerts (WEA).



Using BlackBerry AtHoc's Notification Delivery Server (NDS) console, users first configure the plug-in and set up accounts. They then use BlackBerry AtHoc to set up the IPAWS gateway and configure the IPAWS device. In BlackBerry AtHoc, they also create a mass device endpoint for each device as well as their own COG and other COGs with which they want to communicate. Operators can then send alerts through the BlackBerry AtHoc management tool and can customize the content for the IPAWS devices. Additionally, users can use the out of the box IPAWS COG to COG Alert Template to notify operators that other COGS have sent alerts to their local system.

Operations Environments

BlackBerry AtHoc's High-Availability Architecture

BlackBerry AtHoc's SaaS solution is configured with multiple logical nodes and N-tier architecture to avoid single points of failure. In a catastrophic situation, same configuration is maintained (HOT and online) in a geographically separate data center. All data is replicated in real time across data centers to avoid data loss.

The following map shows the Worldwide BlackBerry AtHoc deployment:

Our SaaS infrastructure resides on a fully redundant hardware, starting from ISP/DIA, Routers, Firewalls, Switches, Load Balancers, all hardware nodes and all the way to dual power supplies and generator backups. In case of a local hardware failure, the system is redundantly architected to handle full load of either data center. This architecture features a high-availability hardware design with 24/7/365 availability that suffers no downtime due to any localized event, maintenance or backups.

Cloud-based Communications Centers
The BlackBerry AtHoc architecture utilizes a cloud-based Notification Delivery Managed Service (NDMS) for delivering telephone, SMS Text and secure email notifications. This service provides a redundant, NIST-compliant capability that is reliable even during localized telecommunications outages.

Our Notification Delivery Managed Services (NDMS) and Personnel Safety Service (PSS) are cloud-based communication services. All BlackBerry AtHoc services utilize multiple Telco carriers to diversify and protect against outages by ensuring the continuity of operations during a failure without impacting alert delivery service. Blocked or busy trunks force traffic to the next available carrier and carrier circuits. The system is based on an n-tier architecture with redundancies at every point in the system (i.e. server components, databases, phone carriers, ISPs, etc.). The data centers act synchronously to deliver messages under normal circumstances. Should one data center become unavailable, others are able to complete the remaining data transactions.

NDMS is activated whenever an operator chooses to alert recipients via a telephony/SMS device. The Application server sends an XML web services call securely over HTTPS/TLS to the NDMS system. The NDMS unpacks the notification, initiates the calls (or text messages), then deletes and anonymizes any/all sensitive contact information from the system. During the life of the notification the application server will

periodically initiate secure web service calls to the NDMS to retrieve updated reporting information and responses that are aggregated and presented to the operators as real time tracking reports. This architecture has been reviewed and approved by several US Government Privacy offices to ensure it complies with all Privacy Act stipulations

BlackBerry AtHoc's Personal Safety Service (PSS) is used to push notifications to Smart Phones. The PSS design works much like that of the NDMS in that when an alert is targeted at a user's smart phone/device, the application server reaches out to the PSS to deliver the message. The PSS subsequently uses the native push notification service for the device (APNS for iOS devices and C2DM for Android devices) to deliver the communication.

Carrier-Grade Solution Details
The BlackBerry AtHoc solution also provides external, multi-redundant telephone, SMS and email communications to ensure that, during a crisis where personnel accountability is critical, communications are successfully delivered to the entire alert population while not over-saturating important local carrier telephone exchanges.

BlackBerry AtHoc's Telephone Alerting System (TAS) utilizes multiple Remote Communications Centers (RCCs) hosted throughout the United States and Europe to ensure timely delivery of phone services to targeted personnel, yet is designed with internal throttling capabilities to avoid overloading local communications networks that have limited capacity.

BlackBerry AtHoc uses diverse and redundant aggregators to deliver e-mail, telephone and SMS Text messages. Each aggregator is architected to sustain a failure without impacting any other service. Blocked or fast busied trunks forces traffic to the next available carrier and carrier circuits automatically without any significant delays.

The Telephone Alerting Service (TAS) uses highly secure and redundant delivery circuits to delivery voice messages to phone devices.

BlackBerry AtHoc's NDMS systems also have the ability to resume service after an interruption at the point in the distribution list where the message stopped. Our delivery service is fully aware of delivery progress status and can failover automatically between multiple delivery gateways during saturation events. In addition, BlackBerry AtHoc utilizes its communications partners to provide additional level of redundancy for telephony services. Having multiple hosted options provides the system with a robust and scalable solution to meet the needs of our most demanding customers in the Department of Defense, Homeland Security, Local Government, Healthcare and Commercial sectors.

Redundancy
BlackBerry AtHoc's datacenters are hosted at redundant, highly available, secure, Tier III data centers supported by redundant telecommunications infrastructures. Datacenters utilize multiple Telco carriers to diversify, protect against outage protection and to ensure the continuity of operations during a failure without impacting alert delivery service. Blocked or busy trunks force traffic to the next available carrier and carrier circuits. The system is based on an n-tier architecture with redundancies at every point in the system (i.e. server components, databases, phone carriers, ISPs, etc.). The data centers act synchronously

to deliver messages under normal circumstances. Should one data center become unavailable, others are able to complete the remaining data transactions.

Backup

BlackBerry AtHoc's Communication Services are hosted at multiple redundant sites. Every site is capable of fully handling transactions if the other becomes unavailable, and transactions will be routed to the available site automatically. Additionally, routine daily backups are preformed to ensure data can be recovered from the previous 24 hours. Service uptime will be 99.95% for notification services, measured on a monthly basis, excluding commercially reasonable scheduled or planned downtime. Server redundancy will be used to minimize scheduled or planned downtime where practical. BlackBerry AtHoc will keep **State of Nebraska** apprised of the schedule for any regularly recurring maintenance windows (which will recur no more frequently than bi-monthly and will be confined to non-peak periods), and AtHoc will inform **State of Nebraska** of any other anticipated actual downtime at least 24 hours in advance. Actual scheduled or planned downtime will normally not exceed ten (10) minutes and will normally not occur more frequently than bi-monthly.

Communication Performance Metrics

Notification delivery speed depends on the configuration and capabilities of the system, including: system configuration (if on-premise) and its network throughput for relaying notifications to BlackBerry AtHoc's NDMS, the delivery channel (e.g., phone call, email, SMS, desktop notification), the communication path within the channel, and the recipient network environment and device (e.g., mobile phone, desktop, etc.).

Below is a summary of performance characteristics and factors that may impact performance and of the performance BlackBerry often observes:

Delivery Step or Delivery Channel	Typical Performance for Sending Notifications (actual receipt time will vary)	Factors Impacting Performance
SMS Text Messaging	The AtHoc SMS Notification Delivery System can send up to 12,000 SMS Text messages per minute to the SMS aggregators.	Impacts on performance include factors specific to mobile environments, such as mobile carrier network capacity and congestion levels, local cellular tower available capacity, base station signal (e.g., range, weather interference) and mobile device readiness (e.g., breakage, no battery charge, phone number blocking).
Mobile Application	The BlackBerry AtHoc Mobile Notification Delivery System can send up to 30,000 mobile push messages per minute to Apple Push Notification Services (APNS) and to Google's Firebase Cloud Messaging (FCM) combined. Apple and	Impacts on performance include factors specific to mobile environments, such as mobile carrier network capacity and congestion levels, local cellular tower available capacity, base station signal (e.g., range, weather

Delivery Step or Delivery Channel	Typical Performance for Sending Notifications (actual receipt time will vary)	Factors Impacting Performance
	Google do not provide any service guarantees.	interference) and mobile device readiness (e.g., breakage, no battery charge, phone number blocking).
Email	The AtHoc Email Notification Delivery System can send up to 24,000 digitally-signed PKI emails per minute to a mass email distribution service.	Impacts on performance include customer email server capacity and configured response to process large incoming amounts of email, current load on the Customer email servers, and Customer email server spam and malware filter response and capacity.
Voice Telephony	BlackBerry AtHoc Telephony Notification Delivery System makes voice phone notifications per the capacity ordered and provisioned to the subscriber	Many factors may impact performance, including a carrier's path capacity, carrier telephony PBX, customer telephony PBX or cellular tower capacity to a handle large number of concurrent voice calls, call duration (message length, number and length of response options), and the customer communications plan.
Desktop Notification	The BlackBerry AtHoc system is designed and configured to handle a specified number of concurrent online BlackBerry AtHoc desktop notification applications. Notifications delivery is made within a configured polling interval - typically 1 minute - where all online desktop applications retrieve pending messages within the polling interval.	Installation of the desktop application and desktop readiness, as well as the capacity and current congestion of communication path to the BlackBerry AtHoc system serving the desktop notification applications (e.g., any LAN, WAN, or other customer network).

The identified factors and others will influence performance differently for each installed or provisioned system, because each customer mobile and enterprise IT environment is different, and BlackBerry AtHoc does not control the entire system. Accordingly, actual notification delivery throughput will vary, and BlackBerry AtHoc cannot assure delivery of any one message by a certain time.

Security and Data

BlackBerry AtHoc software is hosted in highly reliable advanced datacenters in United States that are separate from business operations. Our hosting facilities are SSAE – 16 Certified and LEED Certified Data Centers. Additionally, our Cloud Services (SaaS) fully comply with NIST SP 800-37/53 Federal regulations and FIPS 199 Moderate classification, is ISO 27001 certified and is the only FedRAMP Authorized solution.

Standards and Compliance

The following standards and compliances are among those achieved by BlackBerry AtHoc and are relevant to **State of Nebraska's** consideration of an Emergency Mass Notification platform:

Guideline	Description
Security and Network Compliance and Certifications	BlackBerry AtHoc has numerous security and network certifications and complies with key security requirements, including: • FISMA • NIST SP 800-53 Rev4 IA Control Set • Information Systems Agency (DISA) FSO Gold Standard and applicable STIGs • Secure PKI Digitally Signed On-Premise email delivery • DHS Safety ACT Compliant
HEA and Clery Act Compliance	Amendments to the Higher Education Act and Clery Act require universities to: Develop and implement communication systems for emergencies and develop procedures or notify their community about emergency situations.
ISO 22320	Emergency management — BlackBerry AtHoc is fully compliant with requirements for incident response.
National Fire Alarm and Signaling Code (NFPA 72)	The National Fire Alarm and Signaling Code (NFPA 72) updated its code in 2010 to include Distributed Recipient Mass Notification Systems (DRMNS). The NFPA code provides the blueprint for the implementation of ENS (or as the code labels it DRMNS) in facilities nationwide. BlackBerry AtHoc fully complies with NFPA 72 (2010 and 2013) DRMNS requirements.
NFPA 1600	Standards on Disaster/Emergency Management and Business Continuity Programs. BlackBerry AtHoc fully complies with NFPA 1600.
UFC Recommendations for Network-Centric Alerting Systems	The Unified Facilities Criteria (UFC) 4-021-01 titled "Design and O&M: Mass Notification Systems," provides planning and design of mass notification systems and applies to U.S. military departments and defense agencies. BlackBerry AtHoc fully complies with the specifications for Network-Centric Alerting Systems (NCAS) incorporated in the UFC.
NIST SP 800-53 IA Controls at FIPS-199 Classification	BlackBerry AtHoc has been certified for its SaaS service per NIST SP 800-53 Rev4 IA controls at FIPS-199 Moderate classification. BlackBerry AtHoc is the only vendor to offer this SaaS service certification level.
National Communication System (NCS) Directive 3-10	The National Security Presidential Directive 51/Homeland Security Presidential Directive 20 established a comprehensive program designed to ensure survival of our constitutional form of government and the continuation of the performance of National Essential Functions under all conditions.

Guideline	Description
• DIACAP and ATOs from multiple DoD services and VA, USCG, CBP and TSA	• FIPS 140-2 Compliant
• Air Force Preferred Product List	• DISA Approved Products List
• Navy Marine Corps Intranet (NMCI) Certified	• Compliance with Navy Anti-Terrorism Force Protection (ATFP)
• Army Certificate of Net worthiness	• NIST SP 800-53 Rev4 IA Controls at FIPS-199 Moderate Classification
• Compliance with DoD security standards including Common Access Card (CAC) & Password policies (CSC-STD-002-85), Federal Personal Identity Verification (PIV)	• Support for encrypted communication for all incoming and outgoing communication using DoD and industry standard PKI-encryption
• Compatibility with DISA Windows Gold Disk	• Section 508 and JAWS (Job Access with Speech) compliant desktop software
• Compatibility with Federal Desktop Common Configuration (FDCC) and Air Force Standard Desktop Configuration (SDC)	• Compliance with NFPA 72 2010 Emergency Communication (EC) Distributed Recipient Mass Notification System (DRMNS)
• CAP (Common Alerting Protocol) compliant, supporting emergency management interoperability guidelines	• Compliance with UFC 4-021-01 and UFC 4-010-10 for Network Centric Alerting System (NCAS)
• Presidential Executive Order # 13407	• Sarbanes-Oxley NFCPA
• National Communications System (NCS) Directive 3-10	• OMB Memorandum M-05-16: Regulation on Maintaining
• Federal Continuity Directive 1 (FCD1)	• EAS (IPAWS) Homeland Security Act; Alerts Act of 2008

Prevention of Unauthorized Access
All infrastructures are protected by firewalls, intrusion detection and have 24x7 notifications. All systems are protected by anti-virus and malware check software. Quarterly vulnerability testing and mitigation steps are performed. Physical security of hosted infrastructure is limited to security certified employees and access is on a need-to basis.

Inside the data centers, the platform is protected by industry standard security measures such as:

- DMZ for public facing web servers
- Firewall certifications, including ICSA, Common Criteria
- Evaluation Assurance Level 4, Federal Encryption Processing
- Network and host-based intrusion detection software
- Two-factor authentication for network access using unique login and strong password for authorized employees
- Anti-virus software with automatic updates
- Scanning software for network vulnerabilities
- Proactive notification of security vulnerabilities

Communications Security
BlackBerry AtHoc supports 256-bit SSL/TLS encryption for sending and receiving communications and reporting, regardless of the hosting location or network (internal or external), which could be configured to be FIPS 140-2 compliant (per US government regulations).

The BlackBerry AtHoc system fully meets the National Fire Protection Association 2010/2013 National Fire Alarm and Signaling Code (NFPA 72) requirements for a Distributed Recipient Mass Notification Systems (DRMNS). The system is capable of Section 508 compliant messaging, protects PII (Personally Identifiable Information), meets federal information technology and security policies identified by the Office of Management and Budget (OMB) and the National Institute of Standards and Technology (NIST), is IPv6 compliant and has proven ATO (Authority to Operate) and implementation within DoD networks, being DISA compliant.

Network Security
The datacenter network is protected by industry standard security measures to include two-factor network authentication, enterprise-class firewalls, network-based Intrusion Detection Software (IDS), host-based IDS, IPS, network vulnerability scanning tools and anti-virus software with automatic definition updates.

Datacenters use a secure, dedicated connection to a customer's system and the production network for communication of data. Data is passed using HTTPS with 256-bit SSL encryption.

All datacenters undergo a third-party annual security audit. The audit is designed to expose any system deficiencies, which are then assigned a rating after the annual security audit - critical, high, medium, and low. Critical issues, if found, are addressed immediately. A detailed plan is put into action to address all other deficiencies, including timelines for corrections to be made.

Encryption
The BlackBerry AtHoc solution fully addresses various government certification requirements. The software is fully compliant with provisions for secure communication, authentication and encryption using industry-standard PKI-encryption technologies. Alerts software is DIACAP, NFPA, FIPS 140-2, Section 508 and NIST 800-53 approved and certified. All password fields stored in the database are encrypted using SQL Server TDE to encrypt data at rest and in storage, and all inbound and outbound communication in transit is encrypted with 256-bit SSL using TLS 1.2 transport layer security.

Customer Service and User Support

BlackBerry AtHoc provides responsive customer support with full access to our 24/7/365 support systems, customer portal, and support helpdesk with defined escalation procedures. Additionally, we provide software engineering staff, maintenance staff, and related support systems, as well as professional emergency notification consulting staff to provide our customers with the latest emerging technologies and best practices in unified crisis communication.

Support Levels
The BlackBerry AtHoc Technical Support

- **Basic Conditions** – BlackBerry AtHoc will provide support with respect to the use of the Software only to Licensee's technical personnel or help desk personnel and only for as long as Licensee is paying for

software assurance and technical support services at the applicable option level. All support will be provided in the English language only.

Nature of Support The BlackBerry AtHoc Software Service is provided with Premium Support. The methods of accessing the BlackBerry AtHoc ***Technical Support*** team ***and*** expected response time for issues reported vary based on the level of support purchased and the Severity of the issue. Each service offered within a SA/TS Package will be delivered in English only.

Premium Support: Named Contacts can engage BlackBerry AtHoc Technical Support analysts via telephone or submit issues electronically through the BlackBerry AtHoc Customer Support Portal twenty-four (24) hours-a-day, seven (7) days a week. Severity High Technical issues submitted via the telephone or the BlackBerry AtHoc Customer Support Portal will be routed to the highly skilled technical experts and will be given the highest priority in the response queue. Critical (Severity High) technical issues will have a Response Time Target of two (2) hours.

BlackBerry AtHoc Technical Support Services - Comparison Chart
BlackBerry AtHoc's standard SA/TS Packages (and the options included in each) are as follows. The BlackBerry AtHoc Software Service is provided with Premium Support only.

Service Features

Feature	Standard Support	Premium Support
Coverage and Access	24x7x365 Issue submission to via BlackBerry AtHoc Customer Support Portal[2]	24x7x365 issue submission via Telephone and/or BlackBerry AtHoc Customer Support Portal[2]
BlackBerry AtHoc Customer Support Portal	Included	Included
Named Contacts	10	100
Tech-to-Site Assistance[3, 4]	N/A	Option to purchase at current rates for on-premises installation or integrations

Software Assurance

Feature	Standard Support	Premium Support
BlackBerry AtHoc Maintenance & Minor-Version Software Assurance	Included	Included
BlackBerry AtHoc Major-Version Software Assurance	N/A	Included

Response and Escalation Summary Chart

Issue classifications are outlined in the table below:

Severity	Definition	Initial Response Time Targets
Severity High Critical Business Impact	A Severity High issue is defined as an issue that causes a total loss of service for which no procedural workaround exists. This problem is critical to a customer's ability to operate, and may affect a majority of the existing users. **Note:** BlackBerry AtHoc Support Teams members are paged twenty-four (24) hours a day, seven (7) days a week for critical issues; Customers must agree to be available for engagement 24x7 until relief has been provided.	**Standard** Electronic: 4 hours (during local business hours of customer's head office) **Premium** Phone or Electronic: 2 hours
Severity Medium Significant business impact	A Severity Medium issue is defined as an issue that causes a severe degradation of service to BlackBerry customers. A customer's key business process is impaired but not disabled, with most employees of a customer continuing operation but in a significantly restricted fashion.	**Standard** Electronic: 8 hours (during local business hours of customer's head office) **Premium** Phone or Electronic: 4 hour
Severity Low Moderate business impact	A Severity Low issue is defined as an issue that has slightly compromised the ability of a customer to conduct business. The customer can continue to conduct business and productivity loss is minor, with most employees of a customer not impacted. The situation may be temporarily circumvented with an established work-around.	**Standard** Electronic: 1 business day **Premium** Phone or Electronic: 8 hours

Note: Severity classifications may be updated by BlackBerry during the lifecycle of an issue if the impact to the customer changes.

Note: The foregoing response times are estimates only and shall not be considered a representation or warranty under any agreement the customer may have with BlackBerry including this BlackBerry AtHoc Technical Support Services Program Description.

Training

To minimize expense to the customer, we maximize trainee access to all requisite materials and ensure all training materials are up to date. BlackBerry AtHoc provides all training via its customer portal and on-site or on-line with a Certified Trainer. BlackBerry AtHoc will provide maintenance and support training, covering required technical maintenance, and detailed administrator/operator training for personnel from all entities authorized to activate and control the provided solution. The number of training days and visits is customizable to fit individual customer needs. Recommended training levels are included in the overall proposed solution including annual refresher training. BlackBerry AtHoc on-site training will occur following system installation and client push. In addition to training, BlackBerry AtHoc personnel will work with a

designated functional administrator (or designated representative) to customize the system by creating distribution lists and alerts that match organization processes and procedures.

On-Site / on-line training consists of Operator and Administrator courses. The Operator session (covers alerting, end user management and report reviewer) is approximately 4-6 hours in length. The Administrator and customization session is an additional 4 hours.

Electronic copies of training materials will be provided, as will access to the BlackBerry AtHoc Customer Portal which contains Computer Based Training as well as a variety of operator and end user manuals, guides, checklists, and best practices. Our Training Team continually updates training plans and materials based on new releases and to incorporate feedback from our customers. The latest version, of all documents, is made available via our Customer Portal.

BlackBerry AtHoc has created both a customer and employee Operator certification course. The certification course is designed to assess the readiness of personnel both internal to BlackBerry AtHoc as well as customer designated personnel.

Ideally, for any instructor-led course, we recommend no more than 10 students to an instructor for a course, but we will make exceptions at customer request given the length (two days) of our training engagements.

Training Options/Availability
BlackBerry AtHoc offers a variety of training that is customizable to fit the customer's requirements. Typically, in an enterprise engagement, many training hours are priced into the agreement for usage as required across the enterprise. As the phased rollout is accomplished, training hours may be utilized by the various campuses or headquarters personnel as needed. Different training types (4 total) represent varying numbers of hours that will be specified based on the size of the enterprise. There are two levels or paths of training available including operator training and administrative training.

Operator Training - An operator is described as a role that performs publishing tasks. The Operator course participants gain hands-on experience and proficiency by creating and sending alerts, targeting groups and analyzing reports. Primary audience is the operator tasked with initiating alerts for their organization. This course is taught via the Computer Based Training (CBT) module located on the Customer Portal. It is a prerequisite prior to attending the online instructor lead session.

Administrative Training - A Functional Administrator is an operator with additional privileges and is responsible for maintaining system parameters and creating and managing operators. This role can also create and manage alerts. We recommend each organization with trained operators have at least 1 administrator. The Administrator course participants will gain hands-on experience by creating end user accounts, creating and updating scenarios, creating/importing distribution lists. Primary audience is the individual(s) tasked with maintaining the integrity of the system for their organization. Student prerequisite is the successful completion of the Operator Computer Based Training Course. Each session is generally 4 hours in length but varies based on student computer literacy and questions.

The four types of courses that are made available are as follows:

- The CBT course – is recommended for each member of each group that plans to take online training session. If each member of the group has not completed the CBT course, then the online training session will be re-scheduled. The reason is that the CBT covers basic skills and the online training session covers advanced skills and scenarios. Registration for the CBT can be accomplished through Support at www.athoc.com.
- Online instructor led training - sessions via Go-to-Meeting. Online session offerings will be posted on a customer specified portal. Once the CBT prerequisite course has been satisfactorily completed a session will be scheduled (if not previously accomplished) and a Go-to-Meeting invitation sent to the appropriate personnel.
- Train-the-trainer approach - is to send trainers from a facility/region to in-person training for Train-the-Trainer style instruction. This method can be done at BlackBerry AtHoc headquarters or at State of Nebraska. The trained instructors would be certified as trainers by BlackBerry AtHoc during the training and be responsible for delivering the training to personnel at their facilities.
- On Site Training – located at the State of Nebraska facilities in a "train the trainer" manner, training may be achieved by a certified BlackBerry AtHoc instructor on site directly with the customer.

Training is essential to the on-going health and successful utilization of the BlackBerry AtHoc system to ensure that all personnel are adequately prepared to respond in an emergency situation. As personnel change and new features are introduced to the baseline software, new and refresher training courses as well as train the trainer courses may be required beyond the initial proposal. Typically, these are customer specified and are priced separately. Historically, proposed training and refresher courses have been sufficient.

Implementation Project Milestones and Timelines

The AtHoc team will design a timeline based on project requirements. The TBD designation is a placeholder for **State of Nebraska** to determine the intervals for each entry, according to your desired implementation schedule. We have suggested intervals based on past experience on projects of similar scope.

MS	Description	Owner	Timeline
0	Contract Award	State of Nebraska	TBD
Scope – Phone, SMS, Email			
1	Initial System build, testing and delivery (Enterprise) and Template VPS	AtHoc	MS 0 + 2 days
2	Project Kick Off Meeting	State of Nebraska & AtHoc	MS 0 + 1 Week
3	Complete Operational & Technical Site Surveys for Alarm Scenarios	State of Nebraska & AtHoc	MS 2 + 7 Days
4	System Design and Specs	AtHoc	MS 3 + 5 Days
5	System Configuration	AtHoc	MS 4 + 7 Days
6	System Configuration Acceptance (Enterprise and SubOrg Template VPS)	State of Nebraska	MS 5 + 5 Days

MS	Description	Owner	Timeline
7	Enterprise Build Out – remaining VPSs and Configuration	AtHoc	MS 6 + 10 Days
8	End-User upload / AD Synch	State of Nebraska & AtHoc	MS 7 + 10 Days
9	System Training	State of Nebraska & AtHoc	MS 8 + 5 Days
10	System Verification	State of Nebraska & AtHoc	MS 9 + 1 Days
11	Transition to Support	State of Nebraska & AtHoc	MS 10 + 5 Days

Project Approach: Project Implementation and Post-Implementation Support Handover
The project implementation plan and post-support is a proven and structured process. The high-level phases include Planning, Design and Build, Implementation, Training and Initiation and Production and Maintenance. Each phase builds upon the other using standard tools and processes as outlined in the steps below. The end result is a consistent project flow.

Number	Step	Description
100	Internal Project Setup and Planning	Internal kick-off, collection of information from the sales team, high level planning and preparation for the project and customer kick-off
	Project Kick-Off with Customer and Site Survey	First meeting with customer, present project scope, get buy-in, set expectations and responsibilities, collect initial technical and operational data required for detailed planning and execution. Follow up as required to complete data collection.
200	System Design and Specification	Use the data collected in the site surveys for detailed design and specification of the solution; perform a design review for completeness and feedback
	Procurement	Based on project scope, procure system hardware, software and services, or work with customer to procure and deliver to installation site
	Customer Preparation	If needed, customer may need to prepare site, process IA certification, network configuration, communication across organization, etc.
300	System Installation and Setup	This step includes configuration and setup and as required integration with data sources. Once the core system is installed and configured, it is ready for end-to-end testing, and customer acceptance of core system. In some cases, there will be additional scope to the core system; it may include advanced integrations, failover system setup, integration with local systems, and more.

Number	Step	Description
		This step covers these activities, which may require coordination with other sites and other organizations.
	Core System Testing and Acceptance	Once the core system is installed and configured, it is ready for end-to-end testing, and customer acceptance of core system.
400	Training	Training activities including planning, adapting the training material to the specific implementation (if needed) and completing all required training sessions
500	Production and Maintenance	AtHoc recommends going through a gradual and step-wise process towards operational capability across the entire organization; this period may take several weeks This is also the time for an implementation review, which will assess the actual implementation vs. requirements and plan. At the end of the Break-in period, there will be handover meeting to the Functional System Administrator and AtHoc Technical Support team, for ongoing technical support

Typical implementations include project implementation support provided on-site by BlackBerry AtHoc's Professional Services Engineers(s). Upon final customer acceptance, ongoing support will be handled by the BlackBerry AtHoc Technical Support Team/Help Desk.

Deliverables

BlackBerry AtHoc will submit deliverables, as specifically directed by Operations and Security, to the designated **State of Nebraska** PM who will use reasonable efforts to accept or reject deliverables within five (5) business days of submission. We support this process formally as follows:

No.	Deliverable Name	Description
1	BlackBerry AtHoc Software, COTS	Sent to the customer immediately upon BlackBerry's receipt of a purchase order from customer.
2	Project Implementation Plan	BlackBerry will conduct a survey of the customer environment and develop a project implementation plan. The project implementation plan will include project schedule, detailed requirements for installation and integration support. Customer and BlackBerry will work together in the development of project implementation plan
3	BlackBerry AtHoc SaaS system provisioning (tertiary)	BlakBerry will provision emergency notification capabilities for the customer in its hosted datacenter. This will be for phone, SMS and e-mail based notification alerts.

No.	Deliverable Name	Description
4	System Acceptance Tests	BlackBerry shall conduct system acceptance tests, as described in the SOW and scheduled per the project milestones. Customer shall provide system acceptance upon contractor's completion of all agreed to test plans.
5	Training	BlackBerry shall conduct onsite training for operators and system administrators, per the project implementation plan.
6	Documentation	BBlackBerry shall provide electronic access to soft copies of the training material, operations manuals and AtHoc software documentation.
7	Technical Support and Maintenance	On-going Software Assurance and Technical Support as per the Agreement.

BlackBerry looks forward to working with Operations and Security on all facets of the implemented BlackBerry AtHoc solution. One area of specific concentration will be around overall support, implementation, training and on-going activities to provide a support level that is unparalleled in excellence.

TECHNICAL REQUIREMENTS MATRIX

Please find the completed Technical Requirements Matrix beginning on the following page.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

Bidder Name: Carahsoft Technology Corporation

Each of the items in the Detailed Requirement Matrix in the table below requires a response of one of the following options: "Yes", "3rd Party", "Next Release", and "No". Bidders must respond to the Detailed Requirements Matrix using the matrix format provided and must not reorder the requirements.

The bidder's response must provide enough detail in narrative form to allow the Evaluation Committee to score the bidder's approach to each technical specification.

Only one box may be checked per requirement. If software demonstrations are requested, you may be asked to demonstrate each item marked as "Yes".

The Bidder Response box should be completed if the response to the requirement is "Yes", "3rd Party", or "Next Release". Bidders may also use it with No response if desired. Bidders must provide a response directly in the matrix, using as much space as needed. Explain each response and describe how the proposed solution meets each requirement. Responses do not need to be limited to one line.

Below is a brief definition of each response option. Bidders should carefully read the response definitions as these responses, as well as the entire response to this RFP, will become part of any resulting contract with the awarded contractor.

Yes	Yes, requirement is met and demonstrable in the current release of the product(s) proposed in the bidder's response to this RFP, without manipulation of fields, forms, or the need to add fields or tables to the system.
3rd Party	This requirement is met through the use of a 3rd Party Vendor's product, which is included as part of this proposal. Costs associated with 3rd Party products used to satisfy any requirement must be included in the fixed price cost of the proposed solution.
Next Release	This option should only be used if the requirement will be part of the next release of the product(s) included in the proposed solution. To meet the criteria for using this response, the "next release" must already have an established release date and a published list of what will be included in this release that includes the specific requirement. Established release date must not exceed 6 months from date of proposal.
No	No, the requirement is not or cannot be met by the product(s) included in the proposed solution. A response of "No" to a requirement does not eliminate the bidder's proposal from consideration. All proposals meeting the mandatory requirements set forth in Section II.N will be evaluated and scored by the evaluation committee. The "No" option is also appropriate when a requirement can be met through a separate module or if the module is not included in the fixed price cost proposal. In the above scenario, it is recommended that the bidder note this in the "clarification" section for the requirement and include pricing, if available in Appendix A – section - Optional Products and Services.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

	General Service Requirements Section 1	Yes	3rd Party	Next Release	No
1.1	The emergency mass notification services (EMNS) must be able to reliably and efficiently distribute and manage message notifications through any and all of the following multiple channels. a. Telephony calls to landline/wired phone, including Voice over IP (VoIP); b. Wireless mobile devices; c. SMS, text to wireless mobile devices; d. Mobile device apps; e. Email; f. Desktops; g. Social media such as Facebook and Twitter; h. Common Alerting Protocol (CAP feed), and; i. TTY for hearing impaired. If bidder supports additional channels not listed above, please list them in the space provided below. Describe how the solution will meet this requirement.	X			

Bidder Response:

A library of pre-configured templates is available for a "Quick Publish" capability that allows Operators to quickly communicate with the targeted audience without the need to build the notification contents from scratch. These Quick Publish templates are easily populated with preconfigured placeholders that allow specific details of an event to be published while maintaining consistent communications guidelines.
The information is sent via multiple and redundant means, including:

- **Networked computers** – Secure delivery of audio-visual pop-up notifications to computer desktops connected to the network through BlackBerry AtHoc's Desktop Notifications client. Through our desktop client Operators can target and deliver audio/visual pop-up notifications that are fully customizable.
- **Telephony** – Delivery of voice telephony alerts to any land, VoIP, or mobile phone via on-site or hosted mass dialing services.
- **Text messaging** – Delivery of text messages (SMS) to mobile devices and pagers.
- **Mobile App** – Rapid and scalable delivery of push notifications to mobile devices, response collection, file attachments and location tracking. BlackBerry AtHoc's Mobile App provides two-way communication capabilities to all persons relevant to their proximity to critical resource and dispatch facilities using BYOD or enterprise-managed smartphones and tablets on iOS and Android.
- **Secure Email** – Digitally PKI signed email delivery with attachments, multiple customizable response options that recipients can utilize to respond to the communication.

BlackBerry AtHoc optionally supports mass notification devices that communicate indirectly with large numbers of people, such as:

- **Social Media –** Send alerts through popular social networking channels, including Twitter and Facebook
- **Indoor and Outdoor Speakers –** Audio notifications to outdoor sirens and indoor public address (PA) systems
- **Digital Message Displays –** Activate text and graphical notifications to digital message boards and players.
- **Cable/Satellite TV –** Text, ticker, image or video alerts sent to digital displays
- **Land Mobile Radio Broadcasts –** Audio broadcasts to Land Mobile radio systems
- **XML Feeds -** Output standard XML and CAP feeds (RSS, Atom, and others) integrating with other systems and websites.

		Yes	3rd Party	Next Release	No
1.2	The EMNS must have a minimum of two (2) geographically separated hosting data center locations by at least 250 miles apart. Both locations must be fully stand-alone, and provide true calling redundancy, and must have the capability to access a minimum of two (2) geographically separated locations by at least 250 miles alternate call server locations, with onsite redundancy per each system. The system shall not require the State to purchase of any additional hardware and/or software. Also, list all your data center compliance and certifications such as AICPA SOC 2 and SOC 3, FedRAMP, ISO 27001, etc. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc's fully vendor hosted SaaS solution supports localized, centralized and enterprise-wide deployments. The system is available 24x7x365 with built-in redundancy enabled from BlackBerry's geographically disperse NIST SP 800-53 certified data centers. The primary data center is hosted at a Microsoft Azure facility in Dallas, TX with a redundant failover facility in the greater Ashburn, VA area hosted by Equinix. In case of a localized network outage, the Ashburn, VA data center will automatically provide Business Continuity and full system capabilities.

First of only two FedRAMP authorized crisis communication Cloud Service Provider (CSP). ATOs and iATOs from multiple agencies – Department of State, Energy, Treasury, Transportation, USAID

		Yes	3rd Party	Next Release	No
1.3	The EMNS must be available 99.999% of the time. Describe how the solution will meet this requirement.	X			

Bidder Response:

The BlackBerry AtHoc System has performed with an availably which exceeds 99.95% in the last year.

Metrics	2018
*Availability**	100%

Excluding Planned Maintenance, DR Quarterly Testing

		Yes	3rd Party	Next Release	No
1.4	The EMNS must include 24x7x365 system support, no queue, and no wait customer service/help desk. Describe how the solution will meet this requirement.	X			

Bidder Response:
BlackBerry AtHoc provides responsive customer support with full access to our 24/7/365 support systems, customer portal, and support helpdesk with defined escalation procedures. Additionally, we provide software engineering staff, maintenance staff, and related support systems, as well as professional emergency notification consulting staff to provide our customers with the latest emerging technologies and best practices in unified crisis communication.

		Yes	3rd Party	Next Release	No
1.5	The EMNS must ensure that the database is PII compliant. Describe how the solution will meet this requirement.	X			

Bidder Response:

We comply with PII with data at rest encryption and the data is owned by the customer. BlackBerry AtHoc does not access any customer data unless explicitly required and permission is granted by the customer.

		Yes	3rd Party	Next Release	No
1.6	System upgrades and security patches for the EMNS must be provided at no additional cost to the State. Describe how the solution will meet this requirement.	X			

Bidder Response:

All System patches and upgrades are taken care of by blackberry with our Cloud Solution. When deployed as a fully hosted solution, customers will always be on the latest version of the Software through the life of the contract. BlackBerry publishes one major release of the AtHoc solution per year with 4 quarterly minor releases.

		Yes	3rd Party	Next Release	No
1.7	The EMNS must be capable of being securely accessed by designated division administrators for initiation via any and all of the methods listed below. Please describe how the system can be accessed for notification initiation. a. Any internet access connection, including dial-up or satellite without any additional software; b. Telephone Live support with no waiting cue; c. Email; d. Mobile device apps.	X			

Bidder Response:

This is accomplished based on User and Group defined Roles. AtHoc has many different Roles already defined that Users and Groups can be added to in order to accomplish these tasks.

		Yes	3rd Party	Next Release	No
1.8	The system must support the establishment of multiple notification subdivisions/groups for each division or jurisdiction. Describe how the solution will meet this requirement.	X			

Bidder Response:

Yes, BlackBerry AtHoc is compliant with this requirement. Hierarchical groups can be created by any Admin with the proper rights.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

		Yes	3rd Party	Next Release	No
1.9	The EMNS must allow individual administrators and recipients to designate multiple devices to receive notifications. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc does this through device targeting and selection. This is configured in the Alert Templates.					
		Yes	**3rd Party**	**Next Release**	**No**
1.10	The EMNS must permit recipients to respond immediately on any two-way device (phone, mobile device or email) as well as provide a call back response number for one-way devices like fax machines and one-way pagers. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc complies with this requirement out-of-the-box. Bidirectional communication is part of BlackBerry AtHoc's core functionality. BlackBerry AtHoc allows recipients to respond immediately to alerts over phone, email, SMS text messages, and mobile app. Alert messages can be modified to include call-back information on one-way devices.					
		Yes	**3rd Party**	**Next Release**	**No**
1.11	The EMNS must be compliant with all requirements outlined by IPAWS 2.0 and WEA 2.0, including Spanish language and state/local WEA testing. Describe how the solution will meet these requirements. a. Is EMNS capable of allowing a state authority to issue Wireless Emergency Alerts with an event code of CAE (Child Abduction Alert)? b. Does the EMNS meet all critical functions outlined by FEMA in its vendor letters dated February 27, 2015 and May 2018?	X			
Bidder Response: BlackBerry AtHoc is compliant with FEMA IPAWS 2.0 and WEA 2.0.					

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

		Yes	3rd Party	Next Release	No
1.12	All EMNS access must be compatible with existing equipment without any modification, reconfiguration or additional hardware. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc fully complies with this requirement via our Hosted Cloud Solution					

		Yes	3rd Party	Next Release	No
1.13	The EMNS must allow multiple administrators to make simultaneous outgoing calls. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc allows concurrent logins and does not limit simultaneous outgoing alerts. BlackBerry AtHoc is capable of initiating multiple simultaneous alerts to multiple devices from a single web-based management console.					

		Yes	3rd Party	Next Release	No
1.14	The EMNS must have Common Alerting Protocol (CAP) and RSS outputs. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry fully complies with Output standard XML and CAP feeds (RSS, Atom, and others) integrating with other systems and websites.					

		Yes	3rd Party	Next Release	No
1.15	The EMNS must have the ability to convert text to speech. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc supports text-to-speech (TTS) delivery of alert notifications in the following languages:

- Arabic
- Deutsch (Deutschland)

- English (UK)
- English (US)
- Español (España)
- Español (México)
- Français (Canada)
- Français (France)
- Italiano (Italia)
- Korean (Korea)
- Nederlands (Nederland)
- Portuguese (Portugal)
- Russian (Russia)
- Swedish (Sweden)
- Turkish (Turkey)
- Chinese (S)

		Yes	3rd Party	Next Release	No
1.16	The EMNS must be able to receive multiple responses such as touch-tone signals to initiate further actions. Describe how the solution will meet these requirements. These actions must include: a. Initiate a new notification upon selection of that response; b. Escalate the event upon selection of that response; c. Select a response that must automatically connect to a specific phone number; d. Instantly join a live conference call; e. Transfer the notification to another person if the recipient is unable to respond; If additional responses are available, please list in the space provided below:	X			

Bidder Response:

BlackBerry AtHoc allows alert recipients to join a live conference provided that they select the appropriate response during an alert notification (e.g., "Press 1 to join conference call now"). The system is also capable of connecting users to a specific phone number. Escalation of alert notifications and transferring the notification to another person or group can be done automatically without requiring user input by setting up Fill count and Escalation options for the alert. However, initiation of new notifications upon user input is not supported.

		Yes	3rd Party	Next Release	No
1.17	The proposed EMNS must not disrupt existing network security already in place,and must operate at a minimum of the 2048bit-key encrypted NSA (National Security Agency) standards. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry complies with FedRAMP security requirements and is utilized in 100% of the US Military. BlackBerry AtHoc is the first EMNS solution to achieve FedRAMP Authorization.

		Yes	3rd Party	Next Release	No
1.18	Selectable access and security must be provided for administrators to control all user functions (Example: one user may be allowed to perform all functions; while others may be limited to performing restricted functions such as access only to update call lists, or only to view notifications in progress but unable to modify or end an alert). Describe how the solution will meet this requirement.	X			

Bidder Response:

This is all done through Role based Administration and is fully supported by BlackBerry AtHoc.

		Yes	3rd Party	Next Release	No
1.19	State of Nebraska data must never be sold, transferred, shared, or otherwise used for any other purpose than for explicit use by the EMNS. Likewise, the data must never be reviewed for data harvesting or any other type of metric analysis other than explicitly required for operation of the EMNS. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc would see to it that your data would never be sold, transferred, shared, or otherwise used for any other purpose than for explicit use by the EMNS. Likewise, the data would never be reviewed for data harvesting or any other type of metric analysis other than explicitly required for operation of the EMNS.

		Yes	3rd Party	Next Release	No
1.20	State of Nebraska data is the property of the State of Nebraska and remains so throughout the life of the contract to include any and all renewals and/or extensions. All data will be returned immediately at the end of the contract to the State of Nebraska. No copy of the data will be retained by the contractor. Describe how the solution will meet this requirement.	X			
Bidder Response: As described above. Your data is your data. No copy of the data will be retained by AtHoc.					

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

	Message Management Requirements Section 2	Yes	3rd Party	Next Release	No
2.1	A message initiator must have the ability to create and send notifications in under two (2) minutes. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc allows operators to send notifications with only 2 clicks within seconds of login.

Through a unified and easy to use web-based interface, alert initiators can create and publish notifications on-the-fly or based on pre-configured templates that offer an easy workflow composed of four simplified steps:

- **Content**: Title, Body, Attachments, Informational Links, Placeholders and Response Options.
- **Targeting:** Target users based on Organization Hierarchy, location (building, zip code, county, etc.), role, department or device.
- **Devices**: Target personal devices such as cell phones, email, SMS Text, Mobile App, Mass Communications Devices, with customization options for each.
- **Scheduling**: Schedule future and recurring notifications using intuitive, touch-friendly controls.

		Yes	3rd Party	Next Release	No
2.2	All administrators must be required to have a username and password and a role description defining their scope of authority, division, and limits. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc requires all administrators and alert publishers to have their own usernames and passwords.

BlackBerry AtHoc supports the following roles:

- Accountability Manager
- Accountability Officer
- Activity Log Manager
- Activity Log Viewer
- Advanced Alert Manager
- Alert Publisher
- Connect Agreement Manager

- Dist. Lists Manager
- Download Export File
- Draft Alert Creator
- End Users Manager
- Enterprise Admin
- Organization Admin
- Report Manager
- SDK User
- SSA Operator
- SSA Viewer
- System Admin

		Yes	3rd Party	Next Release	No
2.3	The EMNS must allow message initiator to send notifications to an unlimited number of recipients. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement. BlackBerry AtHoc does not limit the number recipients that can be targeted during alert notifications.

		Yes	3rd Party	Next Release	No
2.4	The EMNS must allow designated division administrators to send pre-scripted or ad hoc emergency action messages using a web-based interface. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc allows administrators to store pre-scripted alerts that can be reused during emergencies. Pre-scripted alerts can be sent using the BlackBerry AtHoc web-based user interface or the BlackBerry AtHoc mobile app.

		Yes	3rd Party	Next Release	No
2.5	Message initiators must be able to contact the notification service through a designated website or through a toll-free telephone number to a 24/7 operations center maintained by the contractor. It must be possible to immediately speak with an operator who can: a. Follow instructions to initiate an alert; b. Determine the scope of authority, division, and limits of the caller. Describe how the solution will meet these requirements.				X
Bidder Response: Initiating an alert via phone call is not supported currently.					

		Yes	3rd Party	Next Release	No
2.6	The EMNS must include multiple methods to initiate messages. The message initiator must be able to: a. Dictate a message to an operator; b. Record a voice message by telephone or Internet; c. Type a text message using an Internet or a telephone text-messaging device; d. Live operators or the system software must be able to convert text messages to highly intelligible speech. Describe how the solution will meet these requirements.	X			
Bidder Response: Operators can type or record a voice message directly on the BlackBerry AtHoc web-based user interface via the internet. However, we do not provide live operators to support dictation of alerts.					

		Yes	3rd Party	Next Release	No
2.7	The EMNS must have the ability to issue multiple notifications modes simultaneously with a single action. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc does not limit the number of simultaneous notification modes that can be activated.

Through a unified and easy to use web-based interface, alert initiators can create and publish notifications on-the-fly or based on pre-configured templates that offer an easy workflow composed of four simplified steps:

- **Content**: Title, Body, Attachments, Informational Links, Placeholders and Response Options.
- **Targeting:** Target users based on Organization Hierarchy, location (building, zip code, county, etc.), role, department or device.
- **Devices**: Target personal devices such as cell phones, email, SMS Text, Mobile App, Mass Communications Devices, with customization options for each.
- **Scheduling**: Schedule future and recurring notifications using intuitive, touch-friendly controls.

		Yes	3rd Party	Next Release	No
2.8	The message initiator must have the ability to define the duration of the notification. (Example: after one hour of attempts to contact recipients the notification must be terminated). Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc supports this requirement out of the box. This can be set for each alert notification directly from the web-based user interface.

		Yes	3rd Party	Next Release	No
2.9	The EMNS must include a series of web based, pre-defined templates for emergency messages which administrators can use to initiate messages or can modify or define new ones. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry includes pre-defined templates based on best practices for different se cases. The included pre-defined templates can be modified, or new ones can be created by the customer.

		Yes	3rd Party	Next Release	No
2.10	The system must allow for unlimited notifications to be created and stored for immediate activation with the ability to quickly edit notifications ad hoc. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc does not limit the number of notifications that can be created or stored for reuse.					

		Yes	3rd Party	Next Release	No
2.11	The message initiator must have the ability to define the type of message (broadcast, first response, round robin, etc.) and the frequency of calling recipients' devices. Describe how the solution will meet this requirement.	X			
Bidder Response: Alert messages can be stored in alert folders for each category required by the customer.					

		Yes	3rd Party	Next Release	No
2.12	The EMNS user interface must allow for: a. The simple creation of notifications; b. The selection of notification recipients or groups and; c. The ability to edit any portion of the notification prior to sending. Describe how the solution will meet these requirements.	X			

Bidder Response:

BlackBerry AtHoc fully complies with this requirement. Through a unified and easy to use web-based interface, alert initiators can create and publish notifications on-the-fly or based on pre-configured templates that offer an easy workflow composed of four simplified steps:

- **Content**: Title, Body, Attachments, Informational Links, Placeholders and Response Options.
- **Targeting:** Target users based on Organization Hierarchy, location (building, zip code, county, etc.), role, department or device.
- **Devices**: Target personal devices such as cell phones, email, SMS Text, Mobile App, Mass Communications Devices, with customization options for each.
- **Scheduling**: Schedule future and recurring notifications using intuitive, touch-friendly controls.

		Yes	3rd Party	Next Release	No
2.13	Message initiator must be able to have scheduled scenarios automatically delivered based on day of month or time of day, where scheduled call-outs can be classified as a recurring activity (Examples: monthly system tests, bi-weekly event postings). Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AHoc supports scheduling of notifications. Operators can schedule future and recurring notifications using intuitive, touch-friendly web-based controls as part of the normal alerting flow.

		Yes	3rd Party	Next Release	No
2.14	The EMNS must have the capability to transmit pre-recorded voice messages or ad hoc messages of any length between 10 seconds and three minutes. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement. BlackBerry AtHoc does not limit length of the messages that can be sent.

		Yes.	3rd Party	Next Release	No
2.15	The EMNS must allow the notification to provide recipients with response options that must immediately connect them to an administrator-defined phone number, such as a Service Desk or conference call bridge. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc allows alert recipients to join a live conference provided that they select the appropriate response during an alert notification (e.g., "Press 1 to join conference call now"). The system is also capable of connecting users to a specific phone number.

		Yes	3rd Party	Next Release	No
2.16	The message initiator must have the ability to listen to the text to speech message before the message is initiated. Describe how the solution will meet this requirement.	X			

Bidder Response:

Supported by allowing the message creator (Operator) to complete the message text and then properly test the message by initially sending the message only to themselves.

		Yes	3rd Party	Next Release	No
2.17	The message initiator must have the ability to set the delivery speed/throttle rate for telephony type messages to be sent. Describe how the solution will meet this requirement.	X			

Bidder Response:

The Blackberry AtHoc TAS telephony delivery system provides automatic throttling features to prevent overloading phone lines for a specific location, exchange or carrier.

		Yes	3rd Party	Next Release	No
2.18	The EMNS must have the ability to store special pronunciations in the system so that when a word is typed in an outgoing message the word is pronounced as phonetically stored in the system. Describe how the solution will meet this requirement.				X

Bidder Response:

Not supported currently.

		Yes	3rd Party	Next Release	No
2.19	The EMNS must have the ability to address the recipient by username as a greeting at the beginning of the message as a default setting. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry supports this requirement out-of-the-box.

		Yes	3rd Party	Next Release	No
2.20	The EMNS must have the ability to set default message sending methods by division or group. Example: a specific group could always default to: "round robin" method unless overridden at the time the message was initiated. Describe how the solution will meet this requirement.	X			

Bidder Response:

Each group can setup their own alert templates. Each template can have unique device delivery choices and templates can be restricted to specific operators. The templates can still be modified from the default at message send time by the Operator with permissions to send / modify that messge.

		Yes	3rd Party	Next Release	No
2.21	The initiator of a message must have the ability to override device preferences. (Example: the administrator must have the option to call "work phones only" during a notification even though the primary device listed in a recipient preference is "mobile phone" the only device called for this recipient in this example would be "work phone") Describe how the solution will meet this requirement.	X			

Bidder Response:

This can be set by Operators / administrators with appropriate permissions, for each alert notification.

		Yes	3rd Party	Next Release	No
2.22	The EMNS must have the ability to include rich media attachments on email notifications. Bidder describe process. (add this type of sentence to all requirements.)	X			

Bidder Response:

BlackBerry AtHoc allows attaching rich media to alert notifications. This includes documents and spreadsheets (.docx, PFD,.txt,.xlsx), photos and videos (jpeg, .gif, .png, .mp4 .mov, .wmv, .mpeg.) and more.

		Yes	3rd Party	Next Release	No
2.23	The message initiator must have the ability to control how call-outs must be terminated, including but not limited to: a. All recipients defined for notification have been reached; b. The pre-determined time period comes to an end; c. A selected number of unsuccessful attempts to reach a recipient has been reached; d. A pre-determined number of recipients from a larger list have been notified; e. Pre-determined positions have been filled by desired number of personnel; f. The callout is stopped manually. Describe how the solution will meet these requirements.	X			

Bidder Response:

The AtHoc system can send a notification to a specific set of recipients for call-outs in a number of ways.

Send message to all recipients. Send to all recipients until the time defined for the call-out notice to end. Send message to a set of recipients until a specific 'fill count' is met (ie.. Message goes to 5, 2 affirmative responses are needed, and 2 respond, the notification will end). Sent the message to a list of recipients one at a time (based upon order, such as seniority or other attribute), until the required number of respondents have replied affirmatively (the fill count being met). Manually terminate the alert notification.

		Yes	3rd Party	Next Release	No
2.24	The EMNS must be able to receive a response from two-way devices to confirm a message has been delivered. Explain the methods.	X			

Bidder Response:

The AtHoc system allows message recipients to provide responses to alert messages that include response options and support two-way communication. Two-way communication is supported for telephone, email, SMS, 2-way pagers and via the AtHoc mobile app. Message delivery reports for each alert notification provide visibility and 100% accountability into user readiness as required and includes the ability to authorize and segregate Operators to view closed-loop, two-way alert and response reports. Operators are one click away from an Event Summary screen on the Management Console home page that shows the status of all ongoing notification events within the system.

Additionally, from any summary report, Operators may publish new alerts to select recipients, based on previous response option groups that were selected (or no response) for follow-up notification. For example, an Operator can send a follow-up alert to just those recipients that responded with "I need more help".

		Yes	3rd Party	Next Release	No
2.25	The EMNS must be able to receive polling information (Example: "press one for Available, press 2 for Deployed, or press 3 for Out of Service"). This ability must be available in some form for all two-way devices and a call back method must be available for one-way devices. Describe how the solution will meet this requirement.	X			

Bidder Response:

The AtHoc system allows message recipients to provide responses to alert messages via response options defined in the alert notification with devices that support two-way communication. Two-way communication is supported for telephone, email, SMS, 2-way pagers and via the AtHoc mobile app. Response options can include any number of numbered response options defined for any alert notification.

		Yes	3rd Party	Next Release	No
2.26	The EMNS must have the option of allowing the recipient to hear the message repeated. Describe how the solution will meet this requirement. (Example: "press zero to hear this message repeated")	X			
Bidder Response: The AtHoc system allows a recipient of an audible notification message over a phone to be prompted to press 0 to replay the message they just heard.					
		Yes	**3rd Party**	**Next Release**	**No**
2.27	There must be a feature that requires a PIN or other authorization of receiver for secure messages before delivery. (Example: "enter your PIN to listen to this message"). Describe how the solution will meet this requirement. If additional authorization criteria is available, please list:	X			
Bidder Response: The AtHoc system allows a recipient of an audible notification message over a phone to be prompted for a PIN before listening to the message. In addition, the AtHoc system can request the person receiving the message to call another number to retrieve their message.					

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

	Contact Management Requirements Section 3	Yes	3rd Party	Next Release	No
3.1	The EMNS database must be capable of allowing system administrators to add or delete contact numbers from the main database or any databases created by the same administrator at any time and provide an audit trail to search and inspect changes and deletions. Describe how the solution will meet this requirement.	X			

Bidder Response:

The BlackBerry AtHoc system has a single main database repository for user data. Operator/Administrators with the proper role-based permissions can add or delete user information including contact number, email addresses and other attributes at any time. Changes are kept in a searchable audit trail that will record Operator/administrator changes to user records.

		Yes	3rd Party	Next Release	No
3.2	The EMNS must have the ability to import contact information from any database via secure file transfer protocol. Describe how the solution will meet this requirement.	X			

Bidder Response:

The AtHoc system provides directory synchronization though LDAP / Active directory using our Active Directory Synchronization tool over a secure connection. In addition, user information can be imported using formatted .CSV files, either manually or in an automated fasion using the user sync tool

		Yes	3rd Party	Next Release	No
3.3	The EMNS must offer (as an option to divisions that require the additional service) a solution that must automatically synchronize the division's contact list with the system database. Describe how the solution will meet this requirement.	X			

Bidder Response:

The BlackBerry AtHoc system has a single main database repository for user data. Specific division data, though in a single database, can be made accessible only to specific Operator/administrators though role based security restrictions.

		Yes	3rd Party	Next Release	No
3.4	The EMNS database must be able to store unlimited devices per database contact and should allow a different calling order of these devices depending on the time of day (location schedule). (Example: recipient might designate a work phone as the primary device between 0700 and 1800hrs, a home phone as primary device between 1800 and 2400hrs.) Describe how the solution will meet this requirement.				X

Bidder Response:

The Blackberry Athoc system allows different calling order for phone devices per message template. Different templates can be scheduled with different option settings to run at different times to effectively provide different orders for different schedules but cannot be defined on a per recipient basis currently.

		Yes	3rd Party	Next Release	No
3.5	The EMNS must allow for each political subdivision and its separate departments or entities to open unlimited sub-accounts with their own secure password and identification. Describe how the solution will meet this requirement.	X			

Bidder Response:

The Blackberry AtHoc allows administrators for each subdivision to create their own operator accounts with ID and password. BlackBerry AtHoc does not limit the number of accounts that can be created.

		Yes	3rd Party	Next Release	No
3.6	Division administrators must have the ability to control access to each of their databases or to subsets of data within their databases. Describe how the solution will meet this requirement.	X			

Bidder Response:

The Blackberry Athoc allows division administrators to control access to user database by groups, alert folders, and more. This is done by assigning the appropriate role to users with operator privileges. BlackBery AtHoc supports the following roles:

- Accountability Manager
- Accountability Officer

- Activity Log Manager
- Activity Log Viewer
- Advanced Alert Manager
- Alert Publisher
- Connect Agreement Manager
- Dist. Lists Manager
- Download Export File
- Draft Alert Creator
- End Users Manager
- Enterprise Admin
- Organization Admin
- Report Manager
- SDK User
- SSA Operator
- SSA Viewer
- System Admin

		Yes	3rd Party	Next Release	No
3.7	The EMNS must be capable of storing: a. An unlimited number of call recipients; b. Data for each recipient in unlimited number of notification groups or lists; c. Updates or changes to recipient information and have those changes reflected in repeated records for every notification group where the recipient is listed. Describe how the solution will meet these requirements.	X			

Bidder Response:

Yes, the BlackBerry AtHoc system meets this requirement.

		Yes	3rd Party	Next Release	No
3.8	Administrators must have access to and be able to modify all user profiles. Describe how the solution will meet this requirement.	X			

Bidder Response:

User Profile
Users may view and update their contact data and targeting attributes (with properly granted permissions). Permissions are centrally managed and configured by Administrators or End User Managers.

Viewable fields are configurable as read-only or editable as configured by the System Administrator. In addition, System Administrators may create multiple fields for telephone numbers (to include personal and business numbers), email and SMS Text fields. Users can also subscribe to receive alerts that are relevant to them or their role within the organization. Subscriptions can also be controlled by Administrators with appropriate permissions through the web-based management console. Each subscription category can be deemed mandatory (for emergency communications) or optional (for low level notifications), allowing maximum flexibility for recipients to opt into or out of notifications through the Self-Service website.

		Yes	3rd Party	Next Release	No
3.9	EMNS must allow administrators to add, update, and delete recipients individually or through an online import process quickly and easily. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement. This is accomplished through a CSV FIle.

		Yes	3rd Party	Next Release	No
3.10	Recipients must have the ability to login to the service in order to update device information if administrator assigns these permissions. Describe how the solution will meet this requirement.	X			

Bidder Response:

AtHoc's Self-Service portal allows for user self-registration, contact data information update, alert channel subscription management, management of dependents, and viewing and responding to live alerts.

Users may view and update their contact data and targeting attributes (with properly granted permissions). Permissions are centrally managed and configured by Administrators or End User Managers.

		Yes	3rd Party	Next Release	No
3.11	Administrators must have the option to give recipients the ability to opt in or out of receiving notifications. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement. This is accomplished in the Self-Service Portal.

		Yes	3rd Party	Next Release	No
3.12	The EMNS must allow for editing of groups, subgroups and management levels to be unlimited. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement. This is accomplished based on the rights granted by the Administrators.

		Yes	3rd Party	Next Release	No
3.13	Layers and types of security must be provided for all user functions (one user may be allowed to perform all functions while others may be limited to performing restricted functions such as roster updates.) Describe how the solution will meet this requirement.	X			

Bidder Response:

This is all done through Role Based Administration.

BlackBerry AtHoc supports the following roles:

- Accountability Manager
- Accountability Officer
- Activity Log Manager
- Activity Log Viewer
- Advanced Alert Manager
- Alert Publisher

- Connect Agreement Manager
- Dist. Lists Manager
- Download Export File
- Draft Alert Creator
- End Users Manager
- Enterprise Admin
- Organization Admin
- Report Manager
- SDK User
- SSA Operator
- SSA Viewer
- System Admin

		Yes	3rd Party	Next Release	No
3.14	All State of Nebraska data base information must remain in the continental United States even for redundancy or backup purposes. Describe how the solution will meet this requirement.	X			

Bidder Response:

The system is available 24x7x365 with built-in redundancy enabled from BlackBerry's geographically disperse NIST SP 800-53 certified data centers. The primary data center is hosted at a Microsoft Azure facility in Dallas, TX with a redundant failover facility in the greater Ashburn, VA area hosted by Equinix. In case of a localized network outage, the Ashburn, VA data center will automatically provide Business Continuity and full system capabilities.

		Yes	3rd Party	Next Release	No
3.15	EMNS provider must have an internet based self-registration page or provide a link from an agencies specified website to same type of page. Self-registration site must have ability to enroll and register their enrollment date, name, address, at least three cell phone numbers per enrollee, cell phone of highest priority and selection from a predefined list of at least ten notification event types. All Enrollment information data fields must be searchable and sortable. User name and password can be synced with existing databases such as Active Directory. System enrollment webpage must include agreement language, acknowledgment of use, explanation of system use, limitations of system and enrollee requirements. Also allows users to un-enroll voluntarily at any time. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc complies with this requirement. This is all done through the BlackBerry AtHoc Self-Registration / Self-Service Portal. From the Self Service portal users can register to receive alerts, receive and respond to critical alerts and accountability events targeted to them, view and manage their profile (e.g., contact information, home address, etc.), manage dependents, and more. The BlackBerry AtHoc self-service portal also supports Single Sign-On (SSO) and two-factor authentication.					

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

System Reporting Requirements Section 4		Yes	3rd Party	Next Release	No
4.1	The EMNS must be capable of sending real time email reports to predetermined recipients. Describe how the solution will meet this requirement.	X			

Bidder Response:

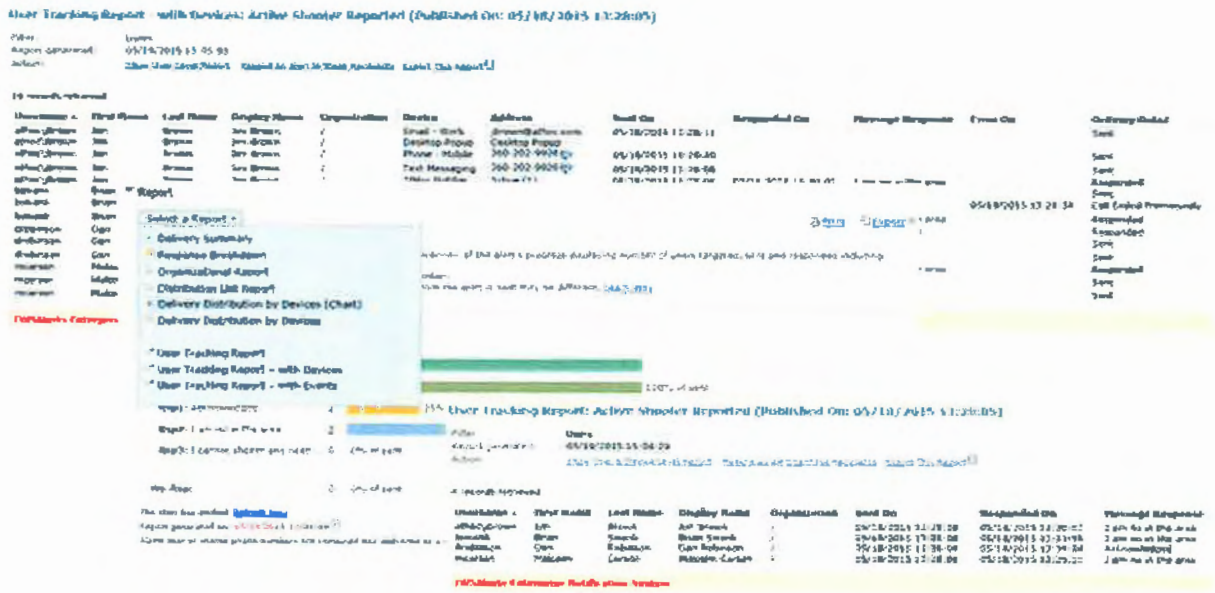
BlackBerry AtHoc complies with this requirement.
Reports can be generated based on selection of user criteria or attributes assigned within the system, such as recipient job role, geographic area, work location or facility. Results on pre-defined or custom reports can be sorted by any user attribute contained in the report, such as Facility, professional role or any others deemed necessary by the Operator. Additionally, reports can be customized to show only user data from specific facilities or globally across the enterprise.

		Yes	3rd Party	Next Release	No
4.2	Real-time reports of all message delivery attempts, confirmations, and polling results must be available by internet once a notification has been sent. Describe how the solution will meet this requirement.	X			

Bidder Response:

Blackberry AtHoc complies with this requirement.
This capability allows Operators and Administrators a common view of current, ongoing accountability events, and allows the generation of ad hoc reports including built-in template reports including the following:

- Delivery Summary
- Organizational Hierarchy
- User tracking by Device or Event
- Delivery Distribution by Devices (chart or table)
- Response Breakdown

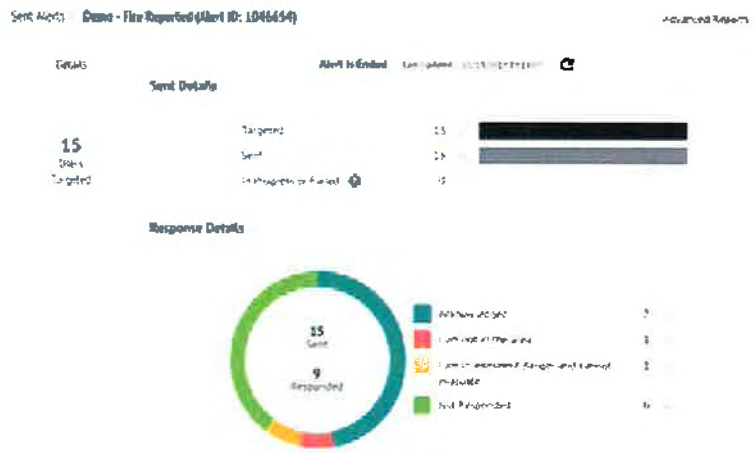


		Yes	3rd Party	Next Release	No
4.3	EMNS reporting must be capable of providing notification content. Describe how the solution will meet this requirement.	X			

Bidder Response:

Notification Tracking and Reporting
BlackBerry AtHoc supports full closed-loop, real-time tracking and response option reporting for all live and previously published notifications (alerts) in the system. As alerts are published, Operators can monitor the alert dashboard for incoming responses from the targeted user population. This gives valuable insight into which user recipients are receiving the notifications successfully and how they are responding (e.g. response option selection and device modality), allowing Emergency Managers to make educated decisions when managing the direction of response to an event. This capability is of paramount importance when situations require accountability reporting for personnel.

In our support of real-time delivery, receipt and response option tracking, we provide Operators with both aggregated overview summaries as well as detailed delivery information for each recipient.



These reports provide visibility and 100% accountability into user readiness as required and includes the ability to authorize and segregate Operators to view closed-loop, two-way alert and response reports. Operators are one click away from an Event Summary screen on the Management Console home page that shows the status of all ongoing notification events within the system.

Additionally, from any summary report, Operators may publish new alerts to select recipients, based on previous response option groups that were selected (or no response) for follow-up notification. For example, an Operator can send a follow-up alert to just those recipients that responded with "I need more help".

		Yes	3rd Party	Next Release	No
4.4	EMNS reporting must be available to view or upload to other reporting databases. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc reports are available to view on the web-based management portal or to download as .CSV files to allow viewing the report on the customer's reporting solution of choice.

		Yes	3rd Party	Next Release	No
4.5	EMNS reporting must be downloadable to a single file report delivered in a CSV format. Describe how the solution will meet this requirement.	X			

Bidder Response:

All Tracking Reports can be printed directly from the management interface or exported into .csv format.

		Yes	3rd Party	Next Release	No
4.6	EMNS reporting must be searchable by all data fields. Describe how the solution will meet this requirement.	X			

Bidder Response:

Reports can be generated based on selection of user criteria or attributes assigned within the system, such as recipient job role, geographic area, work location or facility. Results on pre-defined or custom reports can be sorted by any user attribute contained in the report, such as Facility, professional role or any others deemed necessary by the Operator. Additionally, reports can be customized to show only user data from specific facilities or globally across the enterprise.

Additionally, BlackBerry AtHoc allows operators to search through sent alert reports by:

- Severity
- Type
- Status
- Publisher
- Folder
- Start Date
- End Date

		Yes	3rd Party	Next Release	No
4.7	EMNS reporting must be capable of providing all attempts with specific results to include: a. Recipient response action; b. Message left in voicemail; c. Disconnected; d. Busy; e. Failed notification; f. Summary of responses; g. Time notification was closed. Describe how the solution will meet these requirements.	X			

Bidder Response:

BlackBerry AtHoc fully complies with this requirement. BlackBerry AtHoc supports full closed-loop, real-time tracking and response option reporting for all live and previously published notifications in the system. As communications are published, Operators can monitor the alert dashboard for incoming responses from the targeted population. This gives valuable insight into which recipients are receiving the notifications successfully and how they are responding (e.g. response option selection and device modality), allowing Emergency Managers to make educated decisions when managing the direction of response to an event.

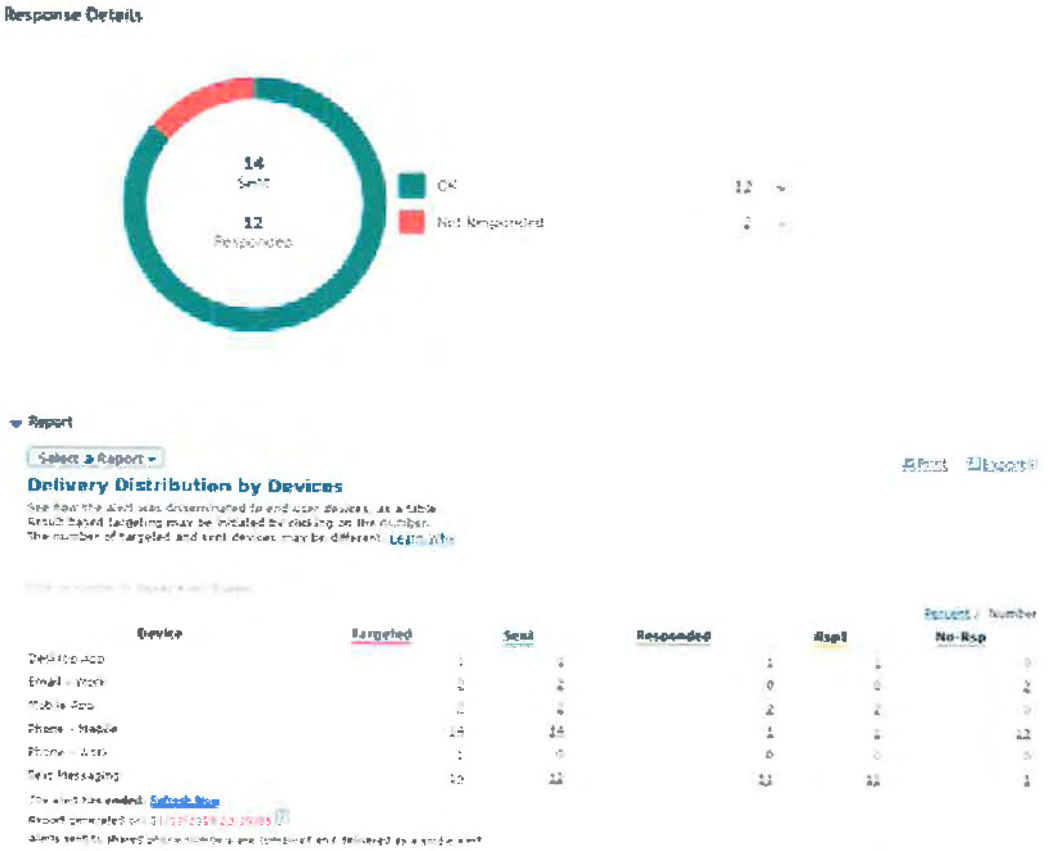
Reports that contain alert content, targeted device info and scheduling options can also be exported to a file or printed directly from the browser. This report information provides insight into accountability status and detailed information for leaders to execute analytics on exported data.

BlackBerry AtHoc also features the following response tracking, reporting and archiving options:

- Distribution lists: detailed real-time table diagram analysis for total sent and received, including acknowledgements and specific response options. Each distribution list can be converted into a list of individual members by a specific response option.
- Reports can be automatically archived for Operator-defined timeframe or rules-based.
- Response tracking reported in real-time XML format or converted to spreadsheet.
- Provide reports that summarize units, individual personnel accountability, and informational status.
- Ability to create reports based on dynamic date query ranges.
- All tracking reports include time-stamp information showing when the notification was sent and when an acknowledgment or response was recorded in the system. Other reports show success/failure rates as a cumulative number or as a percentage of the notified population.

- For Enterprise systems - Enterprise Alerts Usage Summary Report shows the number of notifications and messages by recipient over a designated period for different Virtual Private Systems (VPS).
- For Enterprise systems - Enterprise End User Summary Reports show the number of enabled users across multiple virtual systems.

Sample reports available to Operators on the BlackBerry AtHoc administrative console are included below:




Report
Select a Report
Print
Export
Delivery Distribution by Devices (Chart)
Targeted
Sent
Responded

		Yes	3rd Party	Next Release	No
4.8	EMNS reporting must be capable of providing recipient list. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc fully complies with this requirement.

Distribution lists: detailed real-time table diagram analysis for total sent and received, including acknowledgements and specific response options. Each distribution list can be converted into a list of individual members by a specific response option

		Yes	3rd Party	Next Release	No
4.9	EMNS reporting must be capable of providing time of transmit to each device by each recipient. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc fully complies with this requirement.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

		Yes	3rd Party	Next Release	No
4.10	EMNS reporting must be capable of providing a detailed monthly census per division of the maximum number of enrolled contacts. Describe how the solution will meet this requirement.	X			
Bidder Response: BlackBerry AtHoc supports this requirement. Administrators can create reports on the total number of users enrolled for each division, or for each alert type, and more.					

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

	Other Requirements Section 5	Yes	3rd Party	Next Release	No
5.1	EMNS must have a GIS mapping capability to enable sender to identify and outline geographic areas to receive specific notifications using at a minimum: a. Zip code; b. Radius, polygon or other pre-defined geographic shape; c. Free form, curser-drawn outline of user specific area; d. Use of pre-drawn GIS generated boundary file such as political subdivisions or other. Describe how the solution will meet these requirements	X			

Bidder Response:

Blackberry complies with this requirement. BlackBerry AtHoc supports ESRI-based, geo-centric targeting that allows Operators to target recipients by region, zone, address and point of interest or longitude/latitude. The map interface allows the Operator to search based on address, city, state or zip code.

		Yes	3rd Party	Next Release	No
5.2	EMNS must have automated National Weather Service (NWS) alert capabilities available. Describe how the solution will meet this requirement.	X			

Bidder Response:

Through our Connect Module, we monitor the NWS. Templates can be setup to monitor specific weather events and alerts sent automatically without any action on the part of the Administrators.

		Yes	3rd Party	Next Release	No
5.3	The EMNS must have a minimum of at least two language translation capabilities to include English and Spanish. Describe how the solution will meet this requirement. If more are available, list in the space provided below.	X			

Bidder Response:

BlackBerry AtHoc fully complies with this requirement. BlackBerry AtHoc supports delivery alert notifications in the following languages:

- Arabic
- Deutsch (Deutschland)
- English (UK)
- English (US)
- Español (España)
- Español (México)
- Français (Canada)
- Français (France)
- Italiano (Italia)
- Korean (Korea)
- Nederlands (Nederland)
- Portuguese (Portugal)
- Russian (Russia)
- Swedish (Sweden)
- Turkish (Turkey)

- Chinese (S)

		Yes	3rd Party	Next Release	No
5.4	The EMNS provider must have provided similar services for similar sized customers for a minimum of six (6) years. Describe how the solution will meet this requirement.	X			

Bidder Response:

Blackberry AtHoc has provided EMNS Services for over 20 years.

		Yes	3rd Party	Next Release	No
5.5	A monthly test of each message delivery mode to at least twelve (12) or more recipients by each political subdivision must be included at no additional cost including any new political subdivision subscribers added after the start of the contract. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc does not limit the number of system tests that the customer can perform. There is no additional cost for performing tests.

		Yes	3rd Party	Next Release	No
5.6	The proposed EMNS software must be quoted and be supported as a standard existing and working product from the contractor, not as custom programming. Describe how the solution will meet this requirement.	X			

Bidder Response:

Blackberry complies with this request. BlackBerry AtHoc is a commercial out of the shelf (COTS) EMNS solution.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

		Yes	3rd Party	Next Release	No
5.7	The system should be simple to use and should not require extensive training. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc requires very minimal training. Training Options are listed below.

To minimize expense to the customer, we maximize trainee access to all requisite materials and ensure all training materials are up to date. BlackBerry AtHoc provides all training via its customer portal and on-site or on-line with a Certified Trainer. BlackBerry AtHoc will provide maintenance and support training, covering required technical maintenance, and detailed administrator/operator training for personnel from all entities authorized to activate and control the provided solution. The number of training days and visits is customizable to fit individual customer needs. Recommended training levels are included in the overall proposed solution including annual refresher training. BlackBerry AtHoc on-site training will occur following system installation and client push. In addition to training, BlackBerry AtHoc personnel will work with a designated functional administrator (or designated representative) to customize the system by creating distribution lists and alerts that match organization processes and procedures.

On-Site / on-line training consists of Operator and Administrator courses. The Operator session (covers alerting, end user management and report reviewer) is approximately 4-6 hours in length. The Administrator and customization session is an additional 4 hours.

Electronic copies of training materials will be provided, as will access to the BlackBerry AtHoc Customer Portal which contains Computer Based Training as well as a variety of operator and end user manuals, guides, checklists, and best practices. Our Training Team continually updates training plans and materials based on new releases and to incorporate feedback from our customers. The latest version, of all documents, is made available via our Customer Portal.
BlackBerry AtHoc has created both a customer and employee Operator certification course. The certification course is designed to assess the readiness of personnel both internal to BlackBerry AtHoc as well as customer designated personnel.

Ideally, for any instructor-led course, we recommend no more than 10 students to an instructor for a course, but we will make exceptions at customer request given the length (two days) of our training engagements.

Training Options/Availability

BlackBerry AtHoc offers a variety of training that is customizable to fit the customer's requirements. Typically, in an enterprise engagement, many training hours are priced into the agreement for usage as required across the enterprise. As the phased rollout is accomplished, training hours may be utilized by the various campuses or headquarters personnel as needed. Different training types (4 total) represent varying numbers of hours that will be specified based on the size of the enterprise. There are two levels or paths of training available including operator training and administrative training.

Operator Training - An operator is described as a role that performs publishing tasks. The Operator course participants gain hands-on experience and proficiency by creating and sending alerts, targeting groups and analyzing reports. Primary audience is the operator tasked with initiating alerts for their organization. This course is taught via the Computer Based Training (CBT) module located on the Customer Portal. It is a prerequisite prior to attending the online instructor lead session.

Administrative Training - A Functional Administrator is an operator with additional privileges and is responsible for maintaining system parameters and creating and managing operators. This role can also create and manage alerts. We recommend each organization with trained operators have at least 1 administrator. The Administrator course participants will gain hands-on experience by creating end user accounts, creating and updating scenarios, creating/importing distribution lists. Primary audience is the individual(s) tasked with maintaining the integrity of the system for their organization. Student prerequisite is the successful completion of the Operator Computer Based Training Course. Each session is generally 4 hours in length but varies based on student computer literacy and questions.

The four types of courses that are made available are as follows:

- The CBT course – is recommended for each member of each group that plans to take online training session. If each member of the group has not completed the CBT course, then the online training session will be re-scheduled. The reason is that the CBT covers basic skills and the online training session covers advanced skills and scenarios. Registration for the CBT can be accomplished through Support at www.athoc.com.
- Online instructor led training - sessions via Go-to-Meeting. Online session offerings will be posted on a customer specified portal. Once the CBT prerequisite course has been satisfactorily completed a session will be scheduled (if not previously accomplished) and a Go-to-Meeting invitation sent to the appropriate personnel.
- Train-the-trainer approach - is to send trainers from a facility/region to in-person training for Train-the-Trainer style instruction. This method can be done at BlackBerry AtHoc headquarters or at [CUSTOMER]. The trained instructors would be certified as trainers by BlackBerry AtHoc during the training and be responsible for delivering the training to personnel at their facilities.

- On Site Training – located at the [CUSTOMER] facilities in a "train the trainer" manner, training may be achieved by a certified BlackBerry AtHoc instructor on site directly with the customer.

Training is essential to the on-going health and successful utilization of the BlackBerry AtHoc system to ensure that all personnel are adequately prepared to respond in an emergency situation. As personnel change and new features are introduced to the baseline software, new and refresher training courses as well as train the trainer courses may be required beyond the initial proposal. Typically, these are customer specified and are priced separately. Historically, proposed training and refresher courses have been sufficient.

		Yes	3rd Party	Next Release	No
5.8	The bidder must identify who controls or owns the product. Describe how the solution will meet this requirement.	X			

Bidder Response:

The customer will own all the data. Blackberry AtHoc does not access any data unless requested by the Customer. BlackBerry owns and controls the product/service.

		Yes	3rd Party	Next Release	No
5.9	The bidder must identify what components or elements are leased or partnered. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc cloud services in the US are hosted on Microsoft Azure and Equinix data centers.

		Yes	3rd Party	Next Release	No
5.10	The bidder must identify who owns the elements that are leased or partnered with. Describe how the solution will meet this requirement.	X			

Bidder Response:

Microsoft and Equinix are owners of their respective data centers.

Attachment One
Technical Requirements Matrix
RFP Number 6214 Z1

		Yes	3rd Party	Next Release	No
5.11	The contractor must not require the State or any agency subscribing to the Service to purchase any new additional hardware, software or maintenance to sustain functionality. Describe how the solution will meet this requirement.	X			

Bidder Response:

BlackBerry AtHoc complies with this requirement as our preferred deployment is a Cloud deployment.

		Yes	3rd Party	Next Release	No
5.12	All bidders must include in their proposal response a description of the proposed method of importing the current user data from the current EMNS. Describe how the solution will meet this requirement.	X			

Bidder Response:

Data import can be achieved by CSV file import or via API.

		Yes	3rd Party	Next Release	No
5.13	Bidder must make initial training available for administrators and message initiators available for each division of the EMNS. Additionally, the bidder must provide additional online administrator training to account for turnover and growth to each division at least twelve (12) times per year as needed. Describe how the solution will meet this requirement.	X			

Bidder Response:

To minimize expense to the customer, we maximize trainee access to all requisite materials and ensure all training materials are up to date. BlackBerry AtHoc provides all training via its customer portal and on-site or on-line with a Certified Trainer. BlackBerry AtHoc will provide maintenance and support training, covering required technical maintenance, and detailed administrator/operator training for personnel from all entities authorized to activate and control the provided solution. The number of training days and visits is customizable to fit individual customer needs. Recommended training levels are included in the overall proposed solution including annual refresher training. BlackBerry AtHoc on-site training will occur following system installation and client push. In addition to training, BlackBerry AtHoc personnel will work with a designated functional administrator (or designated representative) to customize the system by creating distribution lists and alerts that match organization processes and procedures.

On-Site / on-line training consists of Operator and Administrator courses. The Operator session (covers alerting, end user management and report reviewer) is approximately 4-6 hours in length. The Administrator and customization session is an additional 4 hours.

Electronic copies of training materials will be provided, as will access to the BlackBerry AtHoc Customer Portal which contains Computer Based Training as well as a variety of operator and end user manuals, guides, checklists, and best practices. Our Training Team continually updates training plans and materials based on new releases and to incorporate feedback from our customers. The latest version, of all documents, is made available via our Customer Portal.
BlackBerry AtHoc has created both a customer and employee Operator certification course. The certification course is designed to assess the readiness of personnel both internal to BlackBerry AtHoc as well as customer designated personnel.

Ideally, for any instructor-led course, we recommend no more than 10 students to an instructor for a course, but we will make exceptions at customer request given the length (two days) of our training engagements.

Training Options/Availability
BlackBerry AtHoc offers a variety of training that is customizable to fit the customer's requirements. Typically, in an enterprise engagement, many training hours are priced into the agreement for usage as required across the enterprise. As the phased rollout is accomplished, training hours may be utilized by the various campuses or headquarters personnel as needed. Different training types (4 total) represent varying numbers of hours that will be specified based on the size of the enterprise. There are two levels or paths of training available including operator training and administrative training.

Operator Training - An operator is described as a role that performs publishing tasks. The Operator course participants gain hands-on experience and proficiency by creating and sending alerts, targeting groups and analyzing reports. Primary audience is the operator tasked with initiating alerts for their organization. This course is taught via the Computer Based Training (CBT) module located on the Customer Portal. It is a prerequisite prior to attending the online instructor lead session.

Administrative Training - A Functional Administrator is an operator with additional privileges and is responsible for maintaining system parameters and creating and managing operators. This role can also create and manage alerts. We recommend each organization with trained operators have at least 1 administrator. The Administrator course participants will gain hands-on experience by creating end user accounts, creating and updating scenarios, creating/importing distribution lists. Primary audience is the individual(s) tasked with maintaining the integrity of the system for their organization. Student prerequisite is the successful completion of the Operator Computer Based Training Course. Each session is generally 4 hours in length but varies based on student computer literacy and questions.

The four types of courses that are made available are as follows:

- The CBT course – is recommended for each member of each group that plans to take online training session. If each member of the group has not completed the CBT course, then the online training session will be re-scheduled. The reason is that the CBT covers basic skills and the online training session covers advanced skills and scenarios. Registration for the CBT can be accomplished through Support at www.athoc.com.
- Online instructor led training - sessions via Go-to-Meeting. Online session offerings will be posted on a customer specified portal. Once the CBT prerequisite course has been satisfactorily completed a session will be scheduled (if not previously accomplished) and a Go-to-Meeting invitation sent to the appropriate personnel.
- Train-the-trainer approach - is to send trainers from a facility/region to in-person training for Train-the-Trainer style instruction. This method can be done at BlackBerry AtHoc headquarters or at [CUSTOMER]. The trained instructors would be certified as trainers by BlackBerry AtHoc during the training and be responsible for delivering the training to personnel at their facilities.
- On Site Training – located at the [CUSTOMER] facilities in a "train the trainer" manner, training may be achieved by a certified BlackBerry AtHoc instructor on site directly with the customer.

Training is essential to the on-going health and successful utilization of the BlackBerry AtHoc system to ensure that all personnel are adequately prepared to respond in an emergency situation. As personnel change and new features are introduced to the baseline software, new and refresher training courses as well as train the trainer courses may be required beyond the initial proposal. Typically, these are customer specified and are priced separately. Historically, proposed training and refresher courses have been sufficient.