

Technical Requirements

Requirements for All Respondents	Supports Y/N	Comments
Policy Requirements ARRC policy dictates that all contractors accessing ARRC's computer resources will comply with our security policies (available upon request).		
ARRC policy requires all software used or installed must be legally licensed.		
ARRC policy is to encrypt data from ARRC databases in flight as well as at rest.		

Requirements for On Premise Solutions	Supports Y/N	Comments
Uses one of the following database systems: SQL Server 2016, 2019 IBMi DB2 Version 7.3		
Uses one of the following drivers for data access: Microsoft ODBC Driver 17 for SQL Server *preferred Microsoft ODBC Driver 13.1 for SQL Server Microsoft OLEDB Driver for SQL Server (MSOLEDBSQL, not SQLOLEDB) SQL Server Native Client iSeries Access ODBC Driver		
Client installation can be packaged for delivery by automated endpoint management system		
Client installation can be made silent for remote delivery.		
Integration of Security: Is the security integrated with our internal Active Directory for authentication?		
Does the application use groups to assign rights?		
Does the application implement minimum required permissions?		
Secure in storage, in transmission, and minimum display of PII: Is ARRC data encrypted in storage? Is ARRC data encrypted in backup? Is ARRC data encrypted in flight?		

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Requirements for Hosted or SAAS Solutions	Supports Y/N	Comments
API exposed for interfaces uses one or more of the following technologies: REST *preferred SOAP JSON *preferred XML		
Solution has a reporting tool for custom report development and data access		
Authentication integrates with our current AD infrastructure		
Does the application use SAML or other well-known protocols to implement federated security?		
Does the application use groups to assign rights?		
Does the application implement minimum required permissions?		
Data security Is ARRC data encrypted in storage? Is ARRC data encrypted in backup? Is ARRC data encrypted in flight?		
Does your policy include a signed non-disclosure agreement in force for ARRC data?		
Ability to support interface development to share data to or from ARRC systems: • JD Edwards ERP for employee data synchronization • Cornerstone LMS (hosted) for employee training records preferably SCORM		
Multi-Factor Authentication		
User time-out		
User Roles controlling access		
able to work offline (store-and-forward)		
available in Android or iOS (Apple) preferably bot		
Is there a Backup and Disaster Recovery Plan for ARRCs data?		
Does your system limit excessive data leakage (limit the amount of data presented or reported on?)		
Can system be highly available?		

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Has a breach notification and response process.		
Have you notified anyone of a breach in the past?		
Will the application be protected from Command and Control or keystroke recording for ARRC data?		
Can the workstations that run the remote software be audited on connection?		
Is there a way to get the list of workstations if not on ARRC property?		
Below is a list of ARRC Infrastructure standard supported software. Please list below any new components that your system would be require ARRC to install or support.		
Up-time requirements: 99.9%. This system must be highly available to ensure no disruption of train service.		
The system must be patched within 1 month for any externally exploitable vulnerabilities		
The host system must not accept email, have a local/administrative user operate a browser to access the internet directly. Any internet connections must be screened against known malicious sites.		
The system must be logged and those logs forwarded or made available to ARRC (Syslog or file logs). Administrative access must be logged. Failed and succeeded logins must be logged. Access to ARRCs backup or data files must be logged. (preferred)		
Retain for 7 years minimum		
Restoration keys (ours, theirs)		
Shared accounts with known password must be limited, identified for ARRC to list as exceptions to policy.		

Below is a list of ARRC Infrastructure standard supported software. Please list below any new components that your system would be require ARRC to install or support.

The ARRC infrastructure currently supports the following. Proposed systems that would integrate without the addition of new components are preferred:

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Operating Systems

- Windows 10 (21H2 current baseline, Windows 11 planned)
- Windows Server 2019 DataCenter
- Linux (RHEL/CentOS 7, Ubuntu 20/22 LTS, others on request, limited though)
- Other (IBM iSeries on POWER10)

Database Systems

- SQL Server 2019, 2016
- IBMi DB2 Version 7.3

Core Systems supported on-premise

- Redundant DNS for internal DNS supporting akrr.local and others
- Redundant DHCP for most corporate subnets
- Redundant Active Directory (no current federation internal nor external)
- Group Policy Management for least privilege, policy enforcement for Windows
- Ivanti Endpoint Management (LANDESK) for provisioning, software distribution, patching
- Ivanti Antivirus (Bitdefender)
- Ivanti Mobile Device Management (MDM) for Android/iOS devices
- Spam Titian Copperfasten Technologies (for email protection)
- iPrism Web Proxy (for outbound web protection)
- Exchange for Email
- SAN for block-level storage
- NAS for file-level storage, secondary storage, and soon off-site storage
- Veeam Backup and Restore for data protection
- Veeam ONE for some system monitoring
- PRTG for most system monitoring
- HPE OneView for some system monitoring
- vSphere Enterprise Plus virtualization with vCenter Centralized Management
- MS Certification Services for internal digital certificates
- IIS and Apache on Windows, Apache on Linux

Core Systems supported off-premise/cloud

- Entrust for internet-facing digital certificates
- Network Solutions for internet-facing DNS supporting akrr.com and others

Core Applications on all Desktops

- Office 2016 Pro
- Firefox
- Chrome
- Edge
- Adobe Acrobat Reader