Unified Command and Decision Support (UICDS)

Pilot System Release Notes

Version 1.2.1
August 03, 2012

UICDS-R-PSRN-R02C05

SAIC®

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Release Notes Approvals

The signatures below constitute approval of this document.

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Revisions

Original: UICDS-RD-PSRN-R01C00

Revision Number	Date	Description of Change(s)
R01C00	11/22/2009	Initial version
R02C01	09/03/2010	Updated for UICDS V1.0.0 software release
R02C02	09/27/2010	Updated for UICDS V1.1.0 software release
R02C03	07/20/2011	Updated for UICDS V1.1.1 software release
R02C04	1/15/2012	Updated for UICDS V1.2.0 software release
R02C05	8/03/2012	Updated for UICDS V1.2.1 software release

1.   Scope

These release notes document the new capabilities, enhancements, and software fixes that were made to UICDS Version 1.2.0 software and are included in UICDS Version 1.2.1 software.

Note that this document is for engineering use only.

2.   Version 1.2.1

New Capabilities and Enhancements

1. Re-engineer and rework the UICDS Installation Kit. The number of steps and the time to install UICDS had decreased substantially.
2. Updated UICDS Install Kit to use Java 7.
3. Updated UICDS Install Kit to use the latest OpenDJ, version 2.5.0.
4. Updated UICDS Install Kit to use the latest eXist, version 1.4.2
5. Updated the AdminConsole to be 508 Compliance.
6. Enhanced the connection checker to attempt resharing of incidents or new work products if they are not up to date on the target core.
7. Enhanced the connection checker to verify agreements so that the necessary roster entries will be properly created if network errors occurred during creation of an agreement.
8. Enhanced the connection checker to heart beat a presence message.
9. Added GetProductCurrentVersion operation to Work Product Service.

Software Resolved Issues

UICDS Version 1.2.1 corrects the following issues that were identified through internal testing and feedback from UICDS demonstrations and technology providers:

1. Improved error handling and reporting when the core is connecting to the XMPP server.
2. Corrected the issue with "Retrieve WorkProduct" link in the KML feed.
3. Corrected the issue with the DigestHelper throwing a null pointer exception when an alert to be created does not have a valid area.
4. Resolved the issue with missing Online Resource ref link in the Map Layer.
5. Fixed an error parsing location message when creating incidents.
6. Fixed null pointer exception in connection checker.

WSDL Issues

1. None.

Known Issues

1. None.

3.   Version 1.2.0 – DHS Release

UICDS V1.2.0 was released for the purpose of conducting a UICDS Pilot with DHS and CBP. In general, this release addresses issues identified by DHS personnel as part of the UICDS certification and accreditation (C&A) process. Specific changes are identified below.

Note that this release was not intended for the general public.

New Capabilities and Enhancements

1. Added the ability to configure UICDS to use MS-SQL instead of H2 and eXist as the UICDS database.
2. Added the ability to configure UICDS use MS Active Directory as the UICDS LDAP server for the purpose of authentication.
3. Added short name ID to work product digests
4. Eliminated the display of stack trace errors on web browsers (i.e. admin console) for security.
5. Upgraded the Smack library to Version 3.2.0.
6. Enhanced cleandatabase.bat file to make the process more automated and target only work product related tables.
7. Updated Alert Service to close/archive alert work products when a cancel alert CAP message is received.
8. Updated IAP Service to account for changes required to enable the use of MS SQL as the database.
9. Improved notification search performance.
10. Added the ability to configure OpenFire to use MS-SQL as its embedded database.
11. Standardized digesting and moved this capability to external xslt files to allow changes without recompiling UICDS code.
12. Created automatic digesting for .shp files.
13. Updated the AdminConsole to display Interest Groups.
14. Enhanced the AdminConsole to allow right click close and archive as 1 step.
15. Added the number of notifications in the queue of a resource instance to the AdminConsole.
16. Identified the configuration settings required to validate incoming messages against UICDS schemas.
17. Identified the configuration settings required to limit the number of concurrent sessions by UICDS clients.
18. Identified the configuration settings required to ensure the use of certificates by UICDS components.
19. Identified the configuration settings required to limit data element size on incoming messages (unbounded schemas issue).

Software Resolved Issues

UICDS Version 1.2.0 corrects the following issues that were identified through internal testing and feedback from UICDS demonstrations and technology providers:

1. Updated Notification Service GetMessageRequest to allow multiple resources to receive notifications.
2. Updated unregister operation to return SOAP fault vice server error.
3. Corrected error handling for incident sharing between cores.
4. Updated InstallKit batch file to include UCore schema files.
5. Improved error handling during database transactions.
6. Improved orphaned node cleaner error handling.
7. Added a check for presence between Tomcat and Openfire to reestablish connectivity after network disconnects.

WSDL Issues
1. Updated GetListOfAlertsRequest operation to be more flexible.
2. Added GetIncidentCurrentVersion operation to Incident Management Service.
3. Created an Interest Group Service to enable the use of generic interest groups (vice only incidents).

Known Issues
2. None.

4.   Version 1.1.1

New Capabilities and Enhancements
1. Enhanced Admin Console that now includes a Health & Status tab to report on the status of UICDS components.
2. Added the list of resource instances to the Admin Console and the ability to create/remove resource instances from the Admin Console.
3. Added configurable XSLTs to the Admin Console to enable viewing of all UICDS Work Products via the form view.
4. Added link to the User Console on the UICDS Install Kit's main page.
5. Improved Work Product versioning performance.
6. Added a GetCapabilities operation to the WMS service.
7. Restricted access to Pubsub nodes.
8. Added the text address in the Digest for Incidents.
9. Add the ability to send Notifications and EDXL-DE messages as XMPP messages.
10. The automatic sharing of incidents now checks all current incidents when a core comes online to see if any incidents should be shared to that core.
11. The automatic sharing process and the current agreement definitions now provide a way to manually control sharing of interest groups.

Software Resolved Issues
UICDS Version 1.1.1 corrects the following issues that were identified through internal testing and feedback from UICDS demonstrations and technology providers:

1. Incident creation failed if no geometry is specified.
2. The database cleanup tool should remove UICDS Work Products, XMPP nodes, and associated information but leave agreements, resource profiles, and resource instances.
3. Some responses that were invalid XML.
4. Incident digest should include organization.
5. Online cores reported incorrectly as offline.
6. Incident name is not updated on shared cores.
7. Javadoc generation.
8. Link to work products in data feeds does not work.
9. Alert Service exceptions from GetAlertByAlertID.
10. Incorrect geometry in Features created from a shapefile.
11. Update to Tomcat 6.0.30 for security fixes.
12. KML should add any additional layer elements as Ground Overlays.

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13. Tomcat temp files are not being deleted.
14. Add retries for XMPP commands that go to remote servers.
15. Work product nodes are not being removed when archived.
16. Don't allow an agreement to be created with an empty remote core.
17. Malformed polygon causes feed errors.
18. Null pointer exception when submitting an EDXL-RM CommitResource with no Location in the Schedule Information element.
19. Incidents without an ActivityCategory are not shared if there are no share rules.

WSDL Changes

There are no WSDL changes from the Version 1.1.0 to Version 1.1.1.

Known Issues

1. Multiple Enhanced Admin Consoles open in the same browser to multiple cores has a memory usage problem over time. Restarting the browser periodically is suggested.
2. Shutting down tomcat using UICDS.BAT reports the following error: "[SC] ControlService FAILED 109: The pipe has been ended." Even though it reports an error the service has shutdown properly.

5.   Version 1.1.0

New Capabilities and Enhancements

1. The Work Product Service CloseProduct operation now returns a WorkProductPublicationResponse type instead of WorkProductProcessingStatus type so that the response contains enough data to call ArchiveProduct.
2. The format string for the current RSS feed was changed from from "rss" to w3crss" to allow for other versions of the RSS feed to be added in the future.
3. The WorkProductDeletedNotifications now contain the last value for the WorkProductIdentification and WorkProductProperties elements instead of just the work product identifier and type to provide clients with more data.

Software Resolved Issues

UICDS Version 1.1.0 corrects the following issues that were identified through internal testing and feedback from UICDS demonstrations and technology providers:

1. The AlertService GetListOfAlerts operation does not return an XPath error.
2. The ResourceManagementService is showing up as ReseourceService in the AdminConsole list of serivces.
3. Profile service should be removed from the list of services in the AdminConsole list of services.
4. Resource Profile and Instance services should not list a published or subscribed work product in the service list in the AdminConsole.
5. The IncidentActionPlan element in the Incident document should be a removed.
6. The InstallKit needs a batch file to clean up the database.
7. GetAgreement returns an invalid XML response when the requested agreement doesn't exist.
8. Request to associate Work Product with an Incident returns internal server error.

9. IAP service does not show up in the list of services on the AdminConsole.
10. The IAP service activateIAP operation does not work properly.
11. No error message in the log when the eXist database password is set incorrectly.
12. XMPP login information is being printed out in the uicds.log file as info.
13. The install-maven-dependencies.bat was not updated to match the jar version numbers.
14. Update DevKit build to include the license files for all our dependencies.
15. Unassociated alerts do not show up in the feeds.
16. The latitude and longitude in the Digest for an Alert Work Product were reversed.

WSDL Changes

This section describes WSDL changes from the Version 1.0 to Version 1.1.0.

1. The Work Product Service CloseProduct operation now returns a WorkProductPublicationResponse type instead of WorkProductProcessingStatus type.
2. The IAP service activateIAP operation was renamed to SetApprovedIAP and a GetApprovedIAP operation was added. The namespace was also changed from http://uicds.org/IAP to http://uicds.org/IAPService to be consistent with all the other services.
3. The Logging Service namespace was changed from http://uicds.org/LoggingMessage to http://uicds.org/LoggingMessage to be consistent with all the other services.
4. The Notification Service WorkProductDeletedNotification type was updated to include the last value for the WorkProductIdentification and WorkProductProperties elements instead of just the work product identifier and type.

Known Issues

1. OpenFire is currently configured to use self-signed certificates.
2. The Axis2 Java example code has not been tested.

6.   Version 1.0.0
These changes were made to UICDS Release 11 to update to UICDS Version 1.1.0

New Capabilities and Enhancements
1. UICDS Version 1.0.0 software is operationally capable. Specifically, UICDS Version 1 enables UICDS core-to-core communications capabilities that were disabled in previous releases of UICDS. UICDS installation and administration instructions have been appropriately updated.
2. To facilitate installation of UICDS, it is now installed as a set of Windows services. The UICDS Installation Guide will walk the user through the process and provides batch files to start and stop the services.
3. The UICDS Installation Kit is configured to use the Openfire XMPP server to allow core to core communications. The installation process will walk the users through the installation and configuration of Openfire.
4. The UICDS work products are now stored in an eXist XML database. This change was made to reduce mapping between XML and database tables and also to enhance work product searching capabilities. The installation process will walk the users through the installation and configuration of eXist.
5. The administration console has been divided into two consoles. The viewing console is located at https://localhost/uicds/Console.html and provides a read-only view of the data for all users in the uicds LDAP group. The admin console is located at https://localhost/uicds/AdminConsole.html and provides a mechinism to modify agreements, resource profiles, and closing and archiving of incidents. This console requires admin group privleges. Both consoles are password protected. Both consoles now have a formatted view of some of the UICDS work products as well as an XML view. UICDS metadata and digest for these work products are also shown in both views.
6. A GetIncidentList operation was added to the Incident Management Service and the GetIncidentList operation on the Directory Service is deprecated. This was done to better align the GetIncidentList operation with the appropriate service.

Software Resolved Issues

UICDS Version 1 corrects the following issues that were identified through internal testing and feedback from UICDS demonstrations and technology providers:

1. Updated client example code to use Maven 2.2.1.
2. Updated Sensor Service to create a digest of its work product.
3. Resource Instance Service has no operation to remove instances.
4. AutoShareIncident process does not allow a share when all share rules are disabled.
5. Error creating OccursAt digest element time when creating Incident from CAP.
6. INETREST_GROUP_MGMT_COMPONENT_NAME spelled wrong in InterestGroupManagementComponent.
7. Timeout trying to lock table NOTIFICATIONMESSAGE in log file and clients report SOAP fault.
8. Remove the unused EntityRecordType complex type from the ResourceProfileService WSDL.
9. Secure the GeoRSS feeds.

10. A null pointer exception is thrown from the CancelAlert operation.
11. Updates to Incident work product are not reflected in the data feeds.
12. Some Admin Console operations should be restricted by security role.
13. The WorkProductService.xsd file should have elementFormDefault set to qualified.
14. Error creating incidents with long ActivityDescriptionText elements.
15. AdminConsole doesn't not place the proper JID when creating Agreement.
16. AdminConsole shows the deleted work product.
17. The NotificationService cannot subscribe work type of 'application/pdf'.
18. Limit Notification queue size so that only the latest notification for a unique work product is kept in the queue.
19. Sending of EDXL-RM messages to explict addresses in the EDXL-DE doesn't work.
20. Resource Instance Service getResourceInstanceList response is invalid if there are no resource instances.
21. GetIncidentResponse invalid XML.
22. xsi:nil is required in ShareRules element or agreement is rejected.
23. When an agreement is recinded the core is not removed from the core list returned from the Directory Service.
24. When a shareIncident request fails, the IncidentManagementService should return an error status instead of false.
25. Resource Profile service overwrites input label and requires unique label.
26. The install-maven-dependencies.bat in release 11 was not updated to match the jav version numbers.
27. The release 11 DevKit.zip file contains the subversion directories.
28. Include the Getting Started Guide example XML files in the DevKit.
29. Documentation for the getMatchingMessages for the Notification Service is wrong.
30. Feeds produce http error 500 if a type of work product exists but we cannot create a feed of that type.
31. GetCoreListResponse is invalid.
32. Add a GetMatchingMessages operation to the NotificationService.
33. The KML feed should only include a ground overlay if there are Feature work products associated with the incident.
34. Created a single batch file to setup the OpenDS Directory Manager and UICDS manager passwords.

WSDL Changes

This section describes WSDL changes from the Release 11.0 to Version 1.0.

1. DirectoryService: Removed the unused IncidentInfoListType complexType. This data element is no longer used.
2. Incident Command Structure: Added an explicit CreateCommandStructure operation. This addition makes ICS service operations consistent with other services (i.e. Create, Update, Delete).
3. Incident Management Service: Added a GetIncidentList operation. This operation was moved from the Profile Service to better align the operation with the service.
4. Resource Instance Service: Added an Unregister operation. This change enables the removal of resource instances.

5. WorkProductService.xsd and ResourceManagementService.xsd: Set the elementFormDefault attribute to qualified. This change enforces the use of namespace prefixes on schema elements.

Known Issues

1. OpenFire is currently configured to use self-signed certificates.