Device42 Remedy Connector

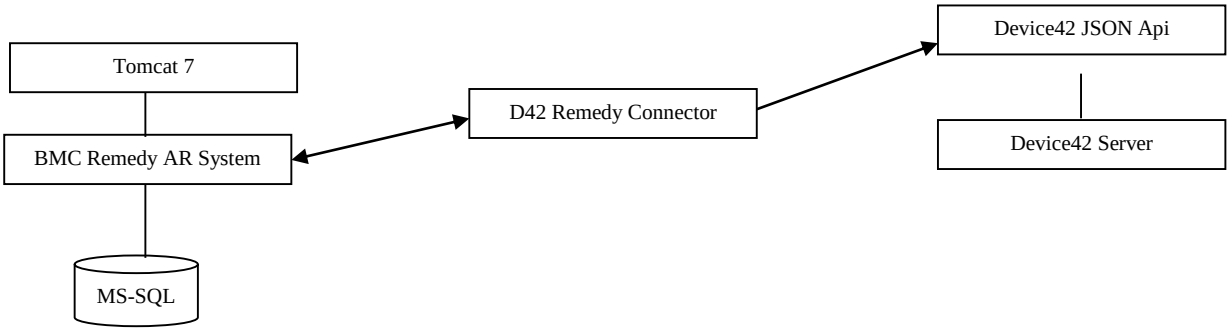
1 Technology Components and Pre-requisites 3
2 Architectural Overview and Solution approach 3
3 Deployment steps 4
3.1 BMC Remedy definition files to import 4
3.2 BMC Remedy – Device42 Base configuration 4
3.3 Install plug-in files 5
3.4 Configure plug-ins within BMC remedy 5
4 Usage 6
4.1 Manual Synchronization 6
4.2 Automatic Synchronization through remedy escalation 7
4.3 Enabling detailed logging 7
4.4 Selective Synchronization 7
4.5 Internal Parameters 8
4.6 Integrate with Incident forms 8
5 Web Service - Get list of Incidents associated to Device42 CI 11
5.1 XML Definition is as follows - 11

1 Technology Components and Pre-requisites

- BMC Remedy Action Request Server v9.0
- BMC Remedy Plug-in server v9.0 (Pre-installed with AR Server)
- Java 1.8
- MS SQL Server 2008
- Tomcat 7.0.53
- BMC ITSM Incident Management

2 Architectural Overview and Solution approach

AR System clients perform external data source operations through the AR System server, plug-in service, and plug-in APIs. The plug-in service extends the AR System server to integrate with external data sources (data not contained in the BMC Remedy AR System database). Current implementation is done using BMC Remedy AR System Filter (AR Filter) API plug-in and Remedy API.



Device42 Remedy connector is initiated through filter plug-in API on modification of the configuration record either manually or through escalation. The connector uses the json client to fetch data from the Device42 API and pushes it into ARServer. Once the data is available in the AR Server, the CI data is available for relating to Incidents. One CI can be related to multiple Incidents and One Incident can have multiple CIs.

3 Deployment steps

3.1 BMC Remedy definition files to import

a. Login to BMC Remedy Developer Studio as BMC Remedy Admin (Developer)
b. First import "Device42_Forms.def" file
c. Import "Device42_IncidentTemplateForm.def" file, This file contains field details needs to be created in OOB HPD:Help Desk form
d. Create all the fields in HPD:Help Desk form by referring the Incident Template form
e. Import rest of the workflow definition files in the order as below –

- Device42_ALs.def

  After importing the Active Links, update the below Active links as described below –

  Active Link Name - Device42:CIs-OnUpdateOpenD42URL__c
  Action -
  PERFORM-ACTION-OPEN-URL new
  http://<hostname>:<port>/<path>/$ObjectType_chr__c$/$ID_int__c$
  Update the url with appropriate hostname, port and path (Do not modify field reference in the url)

  Active Link Name - Device42:HelpDeskOpenD42URLFromTableData__c
  PERFORM-ACTION-OPEN-URL new
  http://<hostname>:<port>/<path>/$ObjectTypeAssoc_col$/$IDAssoc_col$
  Update the url with appropriate hostname, port and path (Do not modify field reference in the url)

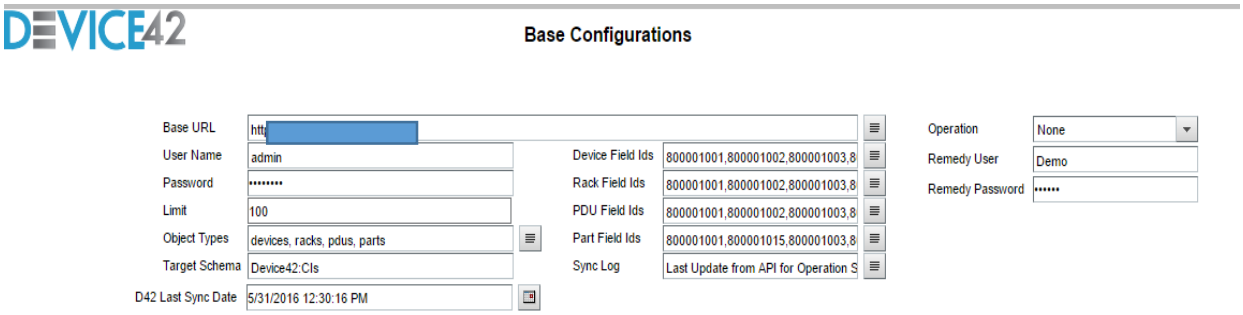
- Device42_AL_Guide.def
- Device42_Filters.def
- Device42_Escalations.def
- Device42_Char_Menu.def

f. Attaching the Character Menu -
After Importing the "Device42_Char_Menu.def", Open HPD:Help Desk form goto "Device42" Panel -> ObjectType field -> Attach this Char Menu

3.2 BMC Remedy – Device42 Base configuration

Open "Device42:BaseConfigurations" form in Browser as Admin and create a Record as in "BaseConfigurations.xlsx"

Please note to update Device42 User credentials and Remedy user credentials accordingly



```
Server-Plugin-Alias: NextId NextId Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: REMEDY.ARF.CBDATA REMEDY.ARF.CBDATA Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: RMDY.ITSM.RLE RMDY.ITSM.RLE Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ALRT.TWITTER ARSYS.ALRT.TWITTER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ARF.QUERYPARSER ARSYS.ARF.QUERYPARSER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ARF.TWITTER ARSYS.ARF.TWITTER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: DSO.FILTERCONFIGURATION DSO.FILTERCONFIGURATION Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: APL.ARDBC.RESTFULARDBCPLUGIN APL.ARDBC.RESTFULARDBCPLUGIN Remedywin:9556
Server-Plugin-Alias: DEVICE42.RESTAPI.PLUGIN DEVICE42.RESTAPI.PLUGIN Remedywin.d42sus.pvt:9999
Disable-ARSignals: F
Plugin: arnativesignal90_build001.dll
Plugin: ardbcconf.dll
```

3.3 Install plug-in files

The following steps are typically for a Windows server. However the same steps may work for Linux server too. Care needs to be taken to update relevant paths for Linux.

- Copy the d42fa.zip under <AR_INSTALL_DIR>\pluginsvr directory.
- For ex – Place the zip file under C:\Program Files\BMC Software\ARSystem\pluginsvr
- Unzip the d42fa.zip file, a new directory d42fa is created with following lib files
  - commons-codec-1.9.jar
  - commons-logging-1.2.jar
  - d42fa.jar
  - httpclient-4.4.1.jar
  - httpcore-4.4.1.jar
  - jettison-1.3.7.jar
  - stax-api-1.0.1.jar

3.4 Configure plug-ins within BMC remedy

The following configuration needs to be done to include the plug-in within BMC.

- Update the following line at the end of list of plugins within ar.conf/ar.cfg under AR_INSTALL_DIR>\Conf directory

  Server-Plugin-Alias: DEVICE42.RESTAPI.PLUGIN DEVICE42.RESTAPI.PLUGIN <RemedyServer>:9999


```
Server-Plugin-Alias: NextId NextId Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: REMEDY.ARF.CBDATA REMEDY.ARF.CBDATA Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: RMDY.ITSM.RLE RMDY.ITSM.RLE Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ALRT.TWITTER ARSYS.ALRT.TWITTER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ARF.QUERYPARSER ARSYS.ARF.QUERYPARSER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: ARSYS.ARF.TWITTER ARSYS.ARF.TWITTER Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: DSO.FILTERCONFIGURATION DSO.FILTERCONFIGURATION Remedywin.d42sus.pvt:9999
Server-Plugin-Alias: APL.ARDBC.RESTFULARDBCPLUGIN APL.ARDBC.RESTFULARDBCPLUGIN Remedywin:9556
Server-Plugin-Alias: DEVICE42.RESTAPI.PLUGIN DEVICE42.RESTAPI.PLUGIN Remedywin.d42sus.pvt:9999
Disable-ARSignals: F
Plugin: arnativesignal90_build001.dll
Plugin: ardbcconf.dll
```


- Add the following lines in pluginsvr_config.xml under <AR_INSTALL_DIR>\ pluginsvr directory. Add the lines within <pluginset> tag at the end

  <plugin>
  <name>DEVICE42.RESTAPI.PLUGIN</name>
  <classname>com.device42.bmc.integration.Device42BMCFilter</classname>
  <filename> <AR_INSTALL_DIR>\/pluginsvr/d42fa/d42fa.jar</filename>
  <pathelement type="location"><AR_INSTALL_DIR>/pluginsvr/d42fa/d42fa.jar</pathelement>
  <pathelement type="location"><AR_INSTALL_DIR>/pluginsvr/d42fa/httpclient-4.4.1.jar</pathelement>
  <pathelement type="location"><AR_INSTALL_DIR>/pluginsvr/d42fa/httpcore-4.4.1.jar</pathelement>
  <pathelement type="location"><AR_INSTALL_DIR>/pluginsvr/d42fa/jettison-1.3.7.jar</pathelement>
  <pathelement type="location"><AR_INSTALL_DIR>/pluginsvr/d42fa/stax-api-1.0.1.jar</pathelement>

</plugin>

- BMC Remedy AR Server needs to be restarted to recognize and load the new plug-in.

```
<userDefined>
<BackupRASHash/>
<KeepCacheSeconds>86400</KeepCacheSeconds>
<Timeout>90</Timeout>
<RemedyServerPort>0</RemedyServerPort>
<KeepResultsSeconds>300</KeepResultsSeconds>
<BackupUserPass/>
<BackupUserName/>
<RemedyServerName>Remedywin.d42sus.pvt</RemedyServerName>
</userDefined>
</plugin>
<plugin>
<name>DEVICE42.RESTAPI.PLUGIN</name>
<classname>com.device42.bmc.integration.Device42BMCFilter</classname>
<filename>C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/d42fa.jar</filename>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/d42fa.jar</pathelement>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/httpclient-4.4.1.jar</pathelement>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/httpcore-4.4.1.jar</pathelement>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/jettison-1.3.7.jar</pathelement>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/d42fa/stax-api-1.0.1.jar</pathelement>
</plugin>
</pluginset>
<pluginset name="PluginSet_1">
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/arreport90_build001.jar</pathelement>
<pathelement type="location">C:/Program Files/BMC Software/ARSystem/pluginsvr/arreportingapi90_build001.jar</pathelement>
</pluginset>
</plugins>
</pluginsvr_config>
```

- The integration requires a fixed license user to fetch and update records. This needs to be configured in the Base configuration form

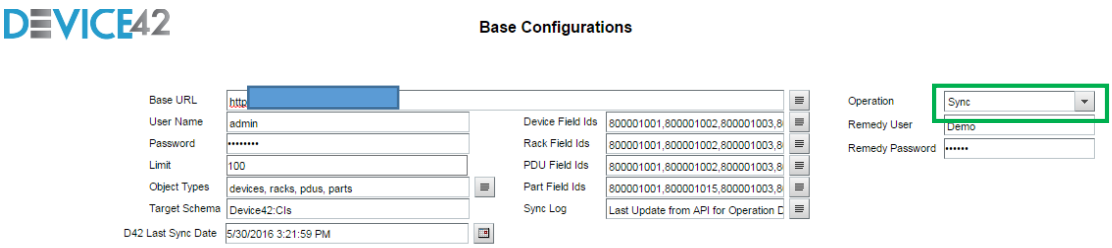
4 Usage

4.1 Manual Synchronization

Base configuration form allows to manually trigger the synchronization. The sync process is split into 2 steps for optimal performance. Both these processes need to be executed one after the other.

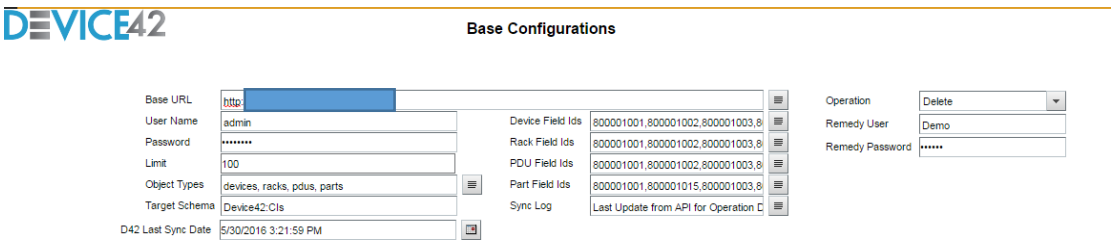
a. Sync – where New CIs on device42 server are newly created and updated attributes of other existing CIs are synched.

This can be executed by selecting Operation = “Sync” and modifying the record.



b. Mark for Delete – where missing ids or deleted CIs in the Device42 server are identified and marked for delete into Remedy AR System.

This can be executed by selecting Operation = “Delete” and modifying the record.



4.2 Automatic Synchronization through remedy escalation

Automatic synchronization is achieved by automating the above 2 steps using Remedy Escalations.

4.3 Enabling detailed logging

The connector uses log4j logging mechanism to log the transaction. To enable detailed logging configure priority value to **info** from *warn* in log4j_pluginsvr.xml under <AR_INSTALL_DIR>\ pluginsvr

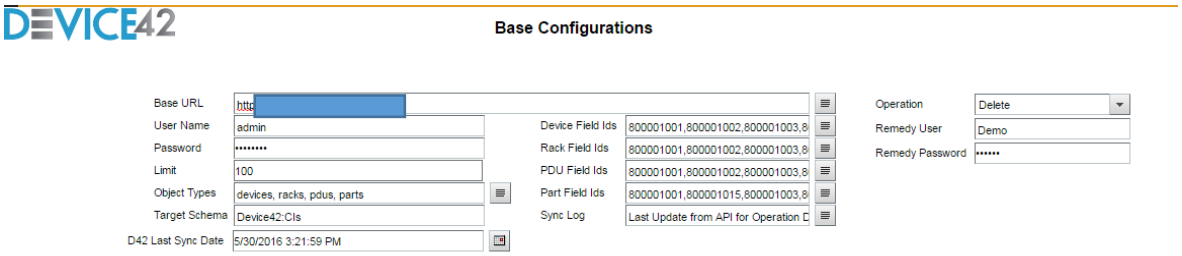
The snapshot of the log shown below:

```
    </logger>
    <logger additivity="true" name="com.bmc.itsm.arl">
       <level value="info"/>
    </logger>
    <logger additivity="false" name="com.bmc.itsm.rle">
       <level value="warn"/>
       <appender-ref ref="SWLMLog"/>
    </logger>
    <logger additivity="false" name="com.bmc.itsm.rleconfig">
       <level value="warn"/>
       <appender-ref ref="SWLMLog"/>
    </logger>
    <root>
        <priority value="info"/>
        <appender-ref ref="PluginLog"/>
     </root>
</log4j:configuration>
```

```
2016-05-30 02:51:59,272 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:26) - ##########################################
2016-05-30 02:51:59,272 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:28) - ## Device42 BMC Remedy Plugin Initiated ##
2016-05-30 02:51:59,272 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:30) - ##########################################
2016-05-30 02:51:59,351 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:56) - ################### -- Configuration Details - Begin -- ######
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:59) - Device42 Server URL : http://equinix.device42.com:8000
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:61) - Device42 Server User : admin
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:63) - BMC Integration User : Demo
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:65) - Device42 Devices Fetch Limit : 100
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:67) - Target CI Schema : Device42:CIs
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:69) - Object Types : devices, racks, pdus, parts
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:71) - Device Field IDs : 800001001,800001002,800001003,800001005,800
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:73) - Rack Field IDs : 800001001,800001002,800001003,800001022,800001
2016-05-30 02:51:59,352 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:75) - PDU Field IDs : 800001001,800001002,800001003,800001020,7
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:77) - Part Field IDs : 800001001,800001015,800001003,800001016,800001
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:79) - Last Sync Date : Sat Jan 17 14:49:58 PST 1970
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:81) - Operation Type : Delete
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:91) - AR Server (from plugin context) : Remedywin
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:93) - AR Port (from plugin context) :32787
2016-05-30 02:51:59,353 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:95) - ################### -- Configuration Details - End -- ########
2016-05-30 02:51:59,354 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:101) - ################### -- Operation Type Delete -- ##############
2016-05-30 02:51:59,354 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:106) - ################### -- Query Type devices -- ################
2016-05-30 02:52:00,707 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:00,713 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 100
2016-05-30 02:52:01,540 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:01,541 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 200
2016-05-30 02:52:02,440 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:02,440 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 300
2016-05-30 02:52:03,191 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:03,191 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 400
2016-05-30 02:52:03,990 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:03,990 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 500
2016-05-30 02:52:04,790 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:04,791 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 600
2016-05-30 02:52:05,575 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
2016-05-30 02:52:05,575 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:121) - Consolidated Device list chunk size : 700
2016-05-30 02:52:06,554 INFO  [pool-5-thread-5] com.device42.bmc.integration.Device42BMCFilter (Device42BMCFilter.java:118) - Temporary Device list chunk size : 100
```

4.4 Selective Synchronization

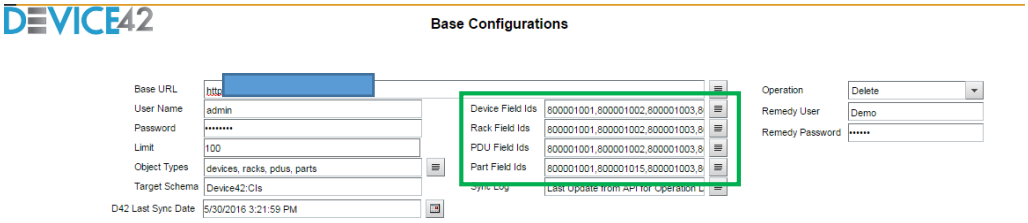
During manual synchronization, the user can select the item category to selectively synchronize the items.



To synchronize all the object types, the content should be “devices, racks, pdus, parts” (excluding the quotes). If selected items need to be synched then the values can be changed as “devices, parts” or “devices”.

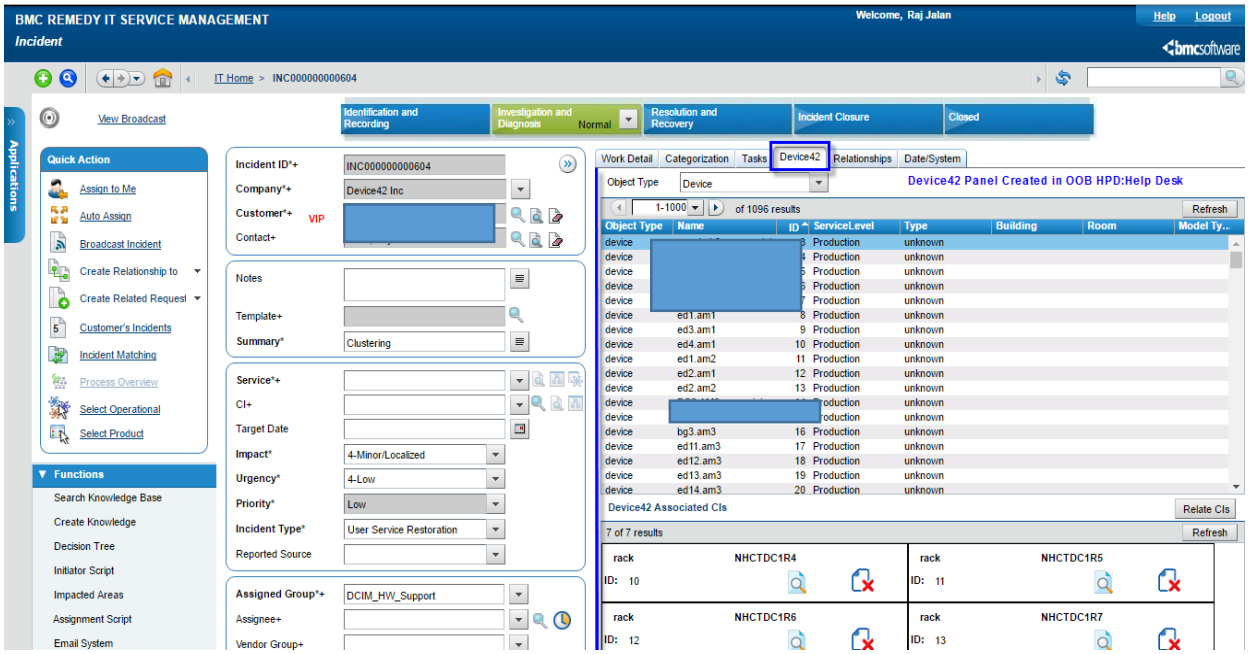
4.5 Internal Parameters

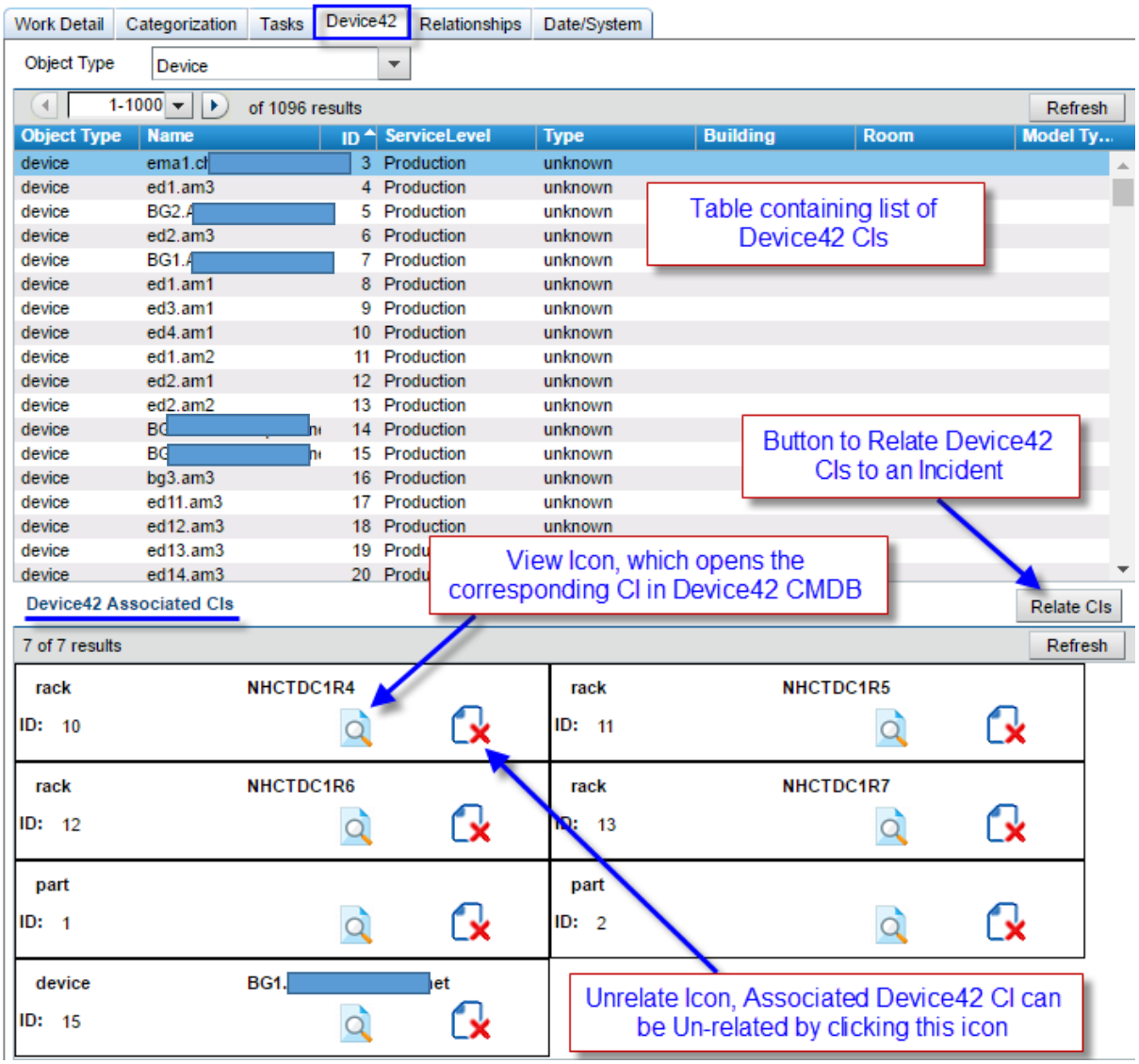
Some of the fields are for internal use only. These fields should not be modified unless there is a need to do so. These are Device Field Ids, Rack Field Ids, PDU Field Ids and Part Field Ids



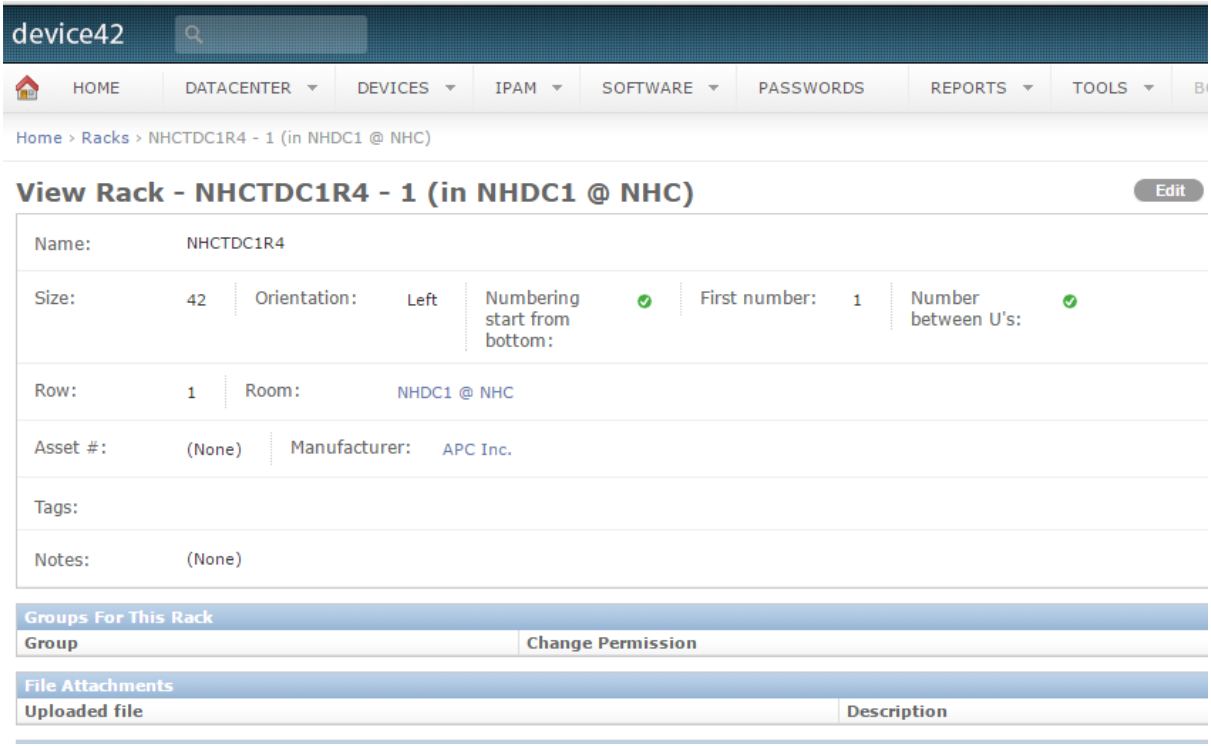
4.6 Integrate with Incident forms

Below image shows HPD:Help Desk integrated with Device42 panel to display list of Device42 CIs and CIs associated to an incident


BMC REMEDY IT SERVICE MANAGEMENT
Incident
Welcome, Raj Jalan
Help
Logout
bmcsoftware
IT Home > INC000000000604
View Broadcast
Identification and Recording
Investigation and Diagnosis
Normal
Resolution and Recovery
Incident Closure
Closed
Quick Action
Assign to Me
Auto Assign
Broadcast Incident
Create Relationship to
Create Related Request
Customer's Incidents
Incident Matching
Process Overview
Select Operational
Select Product
Functions
Search Knowledge Base
Create Knowledge
Decision Tree
Initiator Script
Impacted Areas
Assignment Script
Email System
Incident ID*+
INC000000000604
Company*+
Device42 Inc
Customer*+
VIP
Contact+
Notes
Template+
Summary*
Clustering
Service*+
CI+
Target Date
Impact*
4-Minor/Localized
Urgency*
4-Low
Priority*
Low
Incident Type*
User Service Restoration
Reported Source
Assigned Group*+
DCIM_HW_Support
Assignee+
Vendor Group+
Work Detail
Categorization
Tasks
Device42
Relationships
Date/System
Object Type
Device
Device42 Panel Created in OOB HPD:Help Desk
1-1000
of 1096 results
Refresh
Object Type
Name
ID
ServiceLevel
Type
Building
Room
Model Ty...
Device42 Associated CIs
Relate CIs
7 of 7 results
rack
NHCTDC1R4
ID: 10
rack
NHCTDC1R5
ID: 11
rack
NHCTDC1R6
ID: 12
rack
NHCTDC1R7
ID: 13


Work Detail
Categorization
Tasks
Device42
Relationships
Date/System
Object Type
Device
1-1000
of 1096 results
Refresh
Object Type
Name
ID
ServiceLevel
Type
Building
Room
Model Ty...
device
ema1.cl
3
Production
unknown
device
ed1.am3
4
Production
unknown
device
BG2.A
5
Production
unknown
device
ed2.am3
6
Production
unknown
device
BG1.A
7
Production
unknown
device
ed1.am1
8
Production
unknown
device
ed3.am1
9
Production
unknown
device
ed4.am1
10
Production
unknown
device
ed1.am2
11
Production
unknown
device
ed2.am1
12
Production
unknown
device
ed2.am2
13
Production
unknown
device
BG
14
Production
unknown
device
BG
15
Production
unknown
device
bg3.am3
16
Production
unknown
device
ed11.am3
17
Production
unknown
device
ed12.am3
18
Production
unknown
device
ed13.am3
19
Produ
device
ed14.am3
20
Produ
Table containing list of Device42 CIs
Button to Relate Device42 CIs to an Incident
View Icon, which opens the corresponding CI in Device42 CMDB
Device42 Associated CIs
Relate CIs
7 of 7 results
Refresh
rack
NHCTDC1R4
ID: 10
rack
NHCTDC1R5
ID: 11
rack
NHCTDC1R6
ID: 12
rack
NHCTDC1R7
ID: 13
part
ID: 1
part
ID: 2
device
BG1.
ID: 15
Unrelate Icon, Associated Device42 CI can be Un-related by clicking this icon

On click of View Icon, Device – rack, ID – 10, Name – NHCTDC1R4 Opened in Device42 Page



5 Web Service - Get list of Incidents associated to Device42 CI

Webservice has been published in Remedy server to get list of incidents associated to the Device42 CI. Webservice consuming application has to pass valid device type and device id value to get the Incident Ids

5.1 XML Definition is as follows -

http://10.10.255.107:8080/arsys/WSDL/public/Remedywin/Device42:GetListofIncidentsAssociatedtoCIs

```
<wsdl:definitions xmlns:s0="urn:Device42:GetListofIncidentsAssociatedtoCIs"
 xmlns:soap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:soapenc="http://s
chemas.xmlsoap.org/soap/encoding/"xmlns:wsdl="http://schemas.xmlsoap.org/ws
dl/" xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="urn:Devi
ce42:GetListofIncidentsAssociatedtoCIs">
<wsdl:types>
<xsd:schema elementFormDefault="qualified" targetNamespace="urn:Device42:Ge
tListofIncidentsAssociatedtoCIs">
<xsd:element name="GetIncidentList" type="s0:InputMapping5"/>
<xsd:complexType name="InputMapping5">
<xsd:sequence>
<xsd:element name="DeviceType" type="xsd:string"/>
<xsd:element name="DeviceID" type="xsd:string"/>
</xsd:sequence>
</xsd:complexType>
<xsd:element name="GetIncidentListResponse" type="s0:OutputMapping5"/>
<xsd:complexType name="OutputMapping5">
<xsd:sequence>
<xsd:element maxOccurs="unbounded" name="getListValues">
<xsd:complexType>
<xsd:sequence>
<xsd:element minOccurs="0" name="RelatedIncidents" type="xsd:string"/>
</xsd:sequence>
</xsd:complexType>
</xsd:element>
</xsd:sequence>
</xsd:complexType>
<xsd:element name="AuthenticationInfo" type="s0:AuthenticationInfo"/>
<xsd:complexType name="AuthenticationInfo">
<xsd:sequence>
<xsd:element name="userName" type="xsd:string"/>
<xsd:element name="password" type="xsd:string"/>
<xsd:element minOccurs="0" name="authentication" type="xsd:string"/>
<xsd:element minOccurs="0" name="locale" type="xsd:string"/>
<xsd:element minOccurs="0" name="timeZone" type="xsd:string"/>
</xsd:sequence>
</xsd:complexType>
</xsd:schema>
</wsdl:types>
<wsdl:message name="GetIncidentListSoapOut">
<wsdl:part element="s0:GetIncidentListResponse" name="parameters"></wsdl:pa
rt>
</wsdl:message>
<wsdl:message name="ARAuthenticate">
```

```
<wsdl:part element="s0:AuthenticationInfo" name="parameters"></wsdl:part>
</wsdl:message>
<wsdl:message name="GetIncidentListSoapIn">
<wsdl:part element="s0:GetIncidentList" name="parameters"></wsdl:part>
</wsdl:message>
<wsdl:portType name="Device42_PortPortType">
<wsdl:operation name="GetIncidentList">
<wsdl:input message="s0:GetIncidentListSoapIn"></wsdl:input>
<wsdl:output message="s0:GetIncidentListSoapOut"></wsdl:output>
</wsdl:operation>
</wsdl:portType>
<wsdl:binding name="Device42_PortSoapBinding" type="s0:Device42_PortPortTyp
e">
<soap:binding style="document" transport="http://schemas.xmlsoap.org/soap/h
ttp"/>
<wsdl:operation name="GetIncidentList">
<soap:operation soapAction="urn:Device42:GetListofIncidentsAssociatedtoCIs/
GetIncidentList" style="document"/>
<wsdl:input>
<soap:header message="s0:ARAuthenticate" part="parameters" use="literal"></
soap:header>
<soap:body use="literal"/>
</wsdl:input>
<wsdl:output>
<soap:body use="literal"/>
</wsdl:output>
</wsdl:operation>
</wsdl:binding>
<wsdl:service name="Device42:GetListofIncidentsAssociatedtoCIsService">
<wsdl:documentation>
Webservice to get list of Incidents associated to Device42 CIs
</wsdl:documentation>
<wsdl:port binding="s0:Device42_PortSoapBinding" name="Device42_PortSoap">
<soap:address location="http://remedywin:8080/arsys/services/ARService?serv
er=remedywin&webService=Device42:GetListofIncidentsAssociatedtoCIs"/>
</wsdl:port>
</wsdl:service>
</wsdl:definitions>
```

Webservice can be consumed by calling the below link -

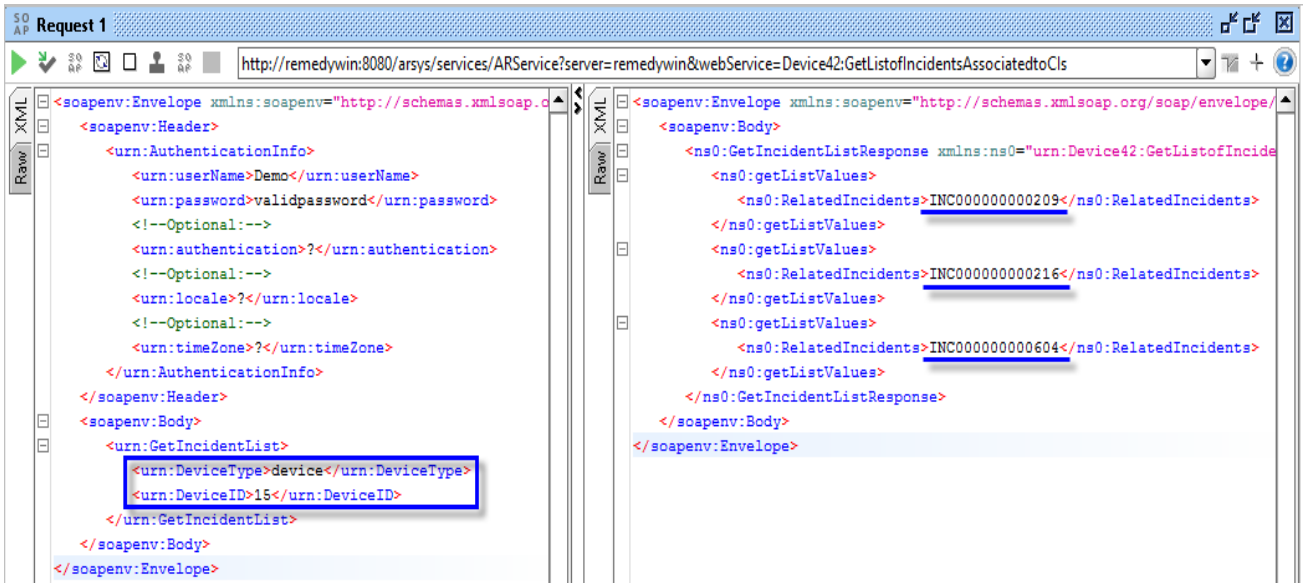
http://10.10.255.107:8080/arsys/WSDL/public/Remedywin/Device42:GetListofIncidentsAssociatedtoCIs

http://<BMC Remedy Midtier servser >/arsys/WSDL/public/<BMC Remedy AR Server>/Device42:GetListofIncidentsAssociatedtoCIs

Below screenshot gives an example –

In Soap UI, Device Type = device and Device ID = 15 has been passed
Output – List of Incidents have been Returned

INC000000000209; INC000000000216; INC000000000604


Request 1
http://remedywin:8080/arsys/services/ARService?server=remedywin&webService=Device42:GetListofIncidentsAssociatedtoCIs
XML
Raw
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.o
<soapenv:Header>
<urn:AuthenticationInfo>
<urn:userName>Demo</urn:userName>
<urn:password>validpassword</urn:password>
<!--Optional:-->
<urn:authentication>?</urn:authentication>
<!--Optional:-->
<urn:locale>?</urn:locale>
<!--Optional:-->
<urn:timeZone>?</urn:timeZone>
</urn:AuthenticationInfo>
</soapenv:Header>
<soapenv:Body>
<urn:GetIncidentList>
<urn:DeviceType>device</urn:DeviceType>
<urn:DeviceID>15</urn:DeviceID>
</urn:GetIncidentList>
</soapenv:Body>
</soapenv:Envelope>
XML
Raw
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
<soapenv:Body>
<ns0:GetIncidentListResponse xmlns:ns0="urn:Device42:GetListofIncide
<ns0:getListValues>
<ns0:RelatedIncidents>INC000000000209</ns0:RelatedIncidents>
</ns0:getListValues>
<ns0:getListValues>
<ns0:RelatedIncidents>INC000000000216</ns0:RelatedIncidents>
</ns0:getListValues>
<ns0:getListValues>
<ns0:RelatedIncidents>INC000000000604</ns0:RelatedIncidents>
</ns0:getListValues>
</ns0:GetIncidentListResponse>
</soapenv:Body>
</soapenv:Envelope>