

**ITSM4Office**

Server Component - Integration Guide v2.0.0.3



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# Integration Summary

The ITSM4Office integration enables you to create, manage and follow-up your tickets from a client-based panel interface interacting with Outlook.

- *Create an Incident semi-automatically recompiling data from the email (contact, summary, Notes, date, and time of the request)*
- *Manage and follow-up of your ITSM workload (assign, dispatch, add work info)*
- *Intuitive Search (Ticket number, keywords, dates, priority....)*
- *Drag and drop of attachment into the ticket be added as a work info*



**Before doing any operation on the Remedy platform it is highly recommended to perform a Database Backup to perform a roll back if needed.**

# Upgrade preliminary steps

## 1. Preparing your v1 system for upgrade to v2

Before upgrading your system, you will need to perform the following actions using **BMC Remedy Developer Studio**.

Schema Name	Type	Action
ITSM4Office:Data:Locale	Form	 Delete
ITSM4Office:CHG:ChangeInterface	Form	 Delete

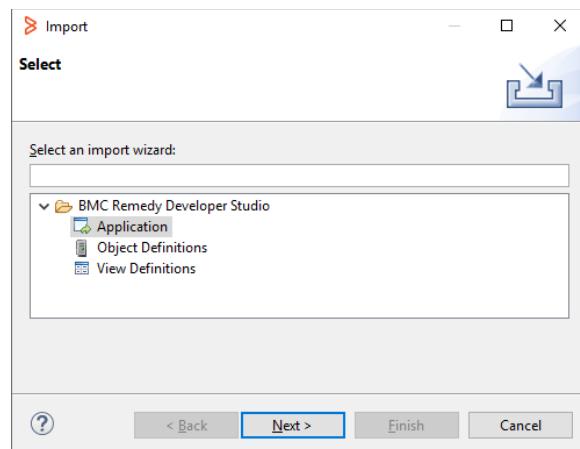
# BMC Remedy AR System

**Info** The following deployment should be done using the **BMC Remedy Developer Studio**.

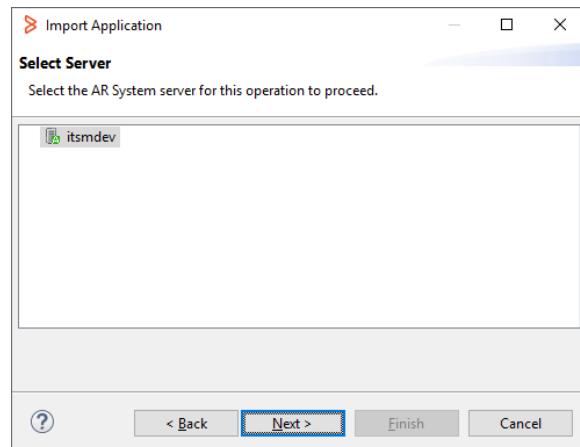
## 2. Import of the Server Component Remedy Application

From the main menu, select **File > Import** and expand **BMC Remedy Developer Studio**.

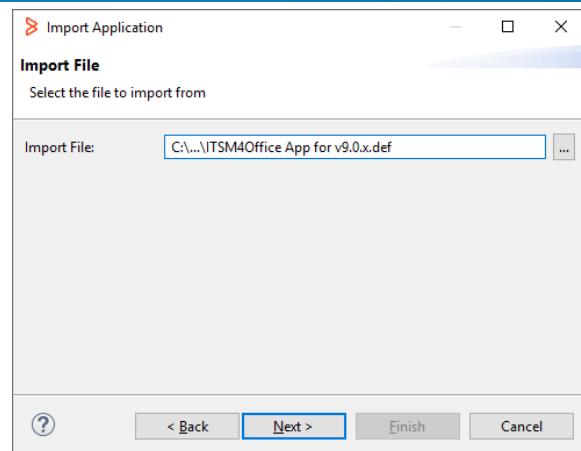
Select **Application** and click **Next**



Select **Server Name** and click **Next**.



Select the proper Application Definition file **ITSM4Office App vX.def** from the appropriate location and click **Next**.



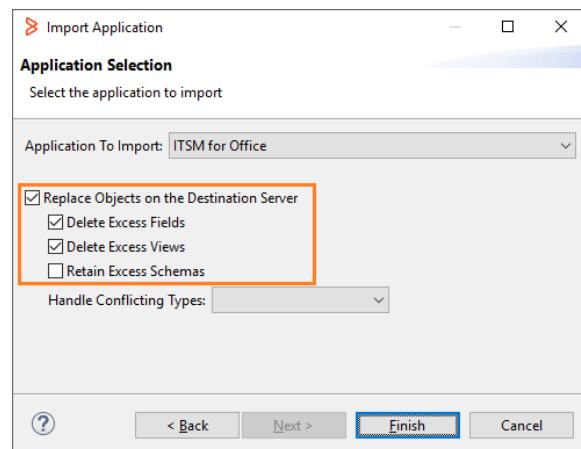
### Note

- ✓ For AR v **8.x** import the **ITSM4Office App for v8.x.def** file
- ✓ For AR v **9.0.x** import the **ITSM4Office App for v9.0.x.def** file
- ✓ For AR v **9.1.x/18.x/19.x** import the **ITSM4Office App for v9.1.x.def** file

Make sure to select:

- **Replace objects on the Destination Server**
- **Delete Excess Fields**
- **Delete Excess Views**

and click **Finish**.



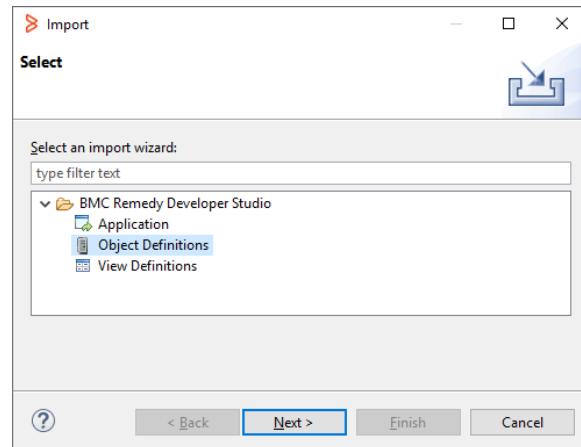
### Known Errors

[v9.0.x] **ERROR (168) / ERROR (412)** after importing ITSM4Office App for v9.0.x.def

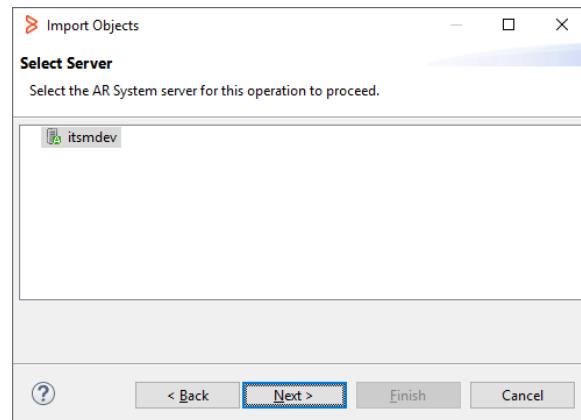
### 3. Import the Other Object Definitions

From the main menu, select **File > Import** and expand BMC Remedy Developer Studio.

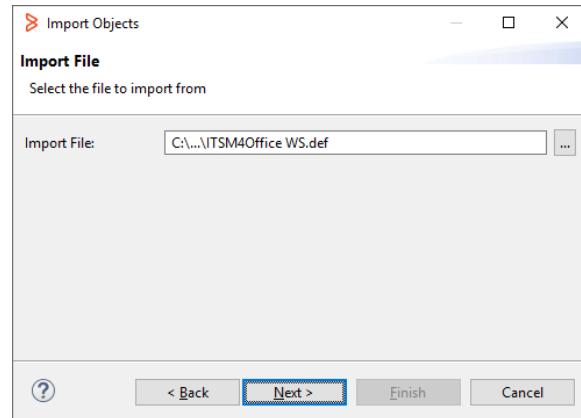
Select **Object Definitions** and click **Next**



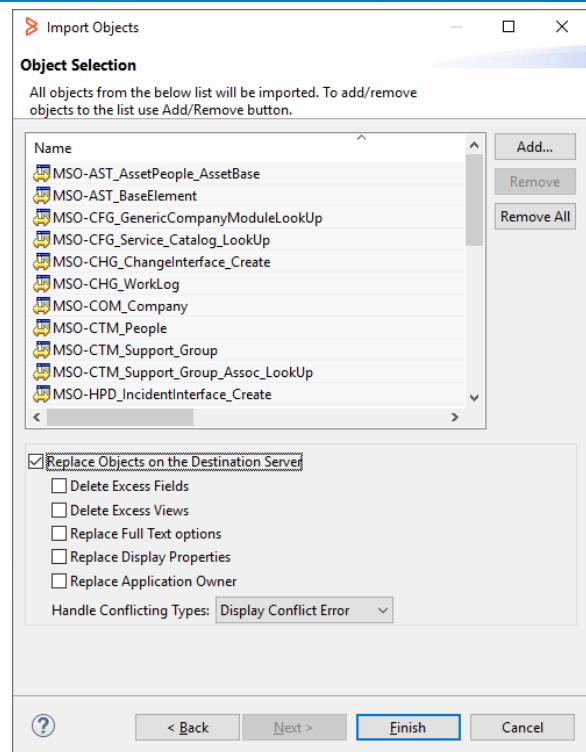
Select **Server Name** and click **Next**.



Select file **ITSM4Office WS.def** from the appropriate location and click **Next**.



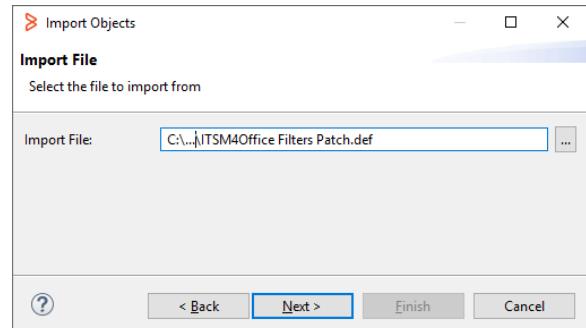
Make sure to select **Replace objects** on the Destination Server and click **Finish**.



### Note

- ✓ For AR v9.1.x and later import the incremental **ITSM4Office WS v9.1.x.def** definition file in addition to the Base WS Definition.

Follow the same steps to import the Object Definition file **ITSM4Office Filters Patch.def**

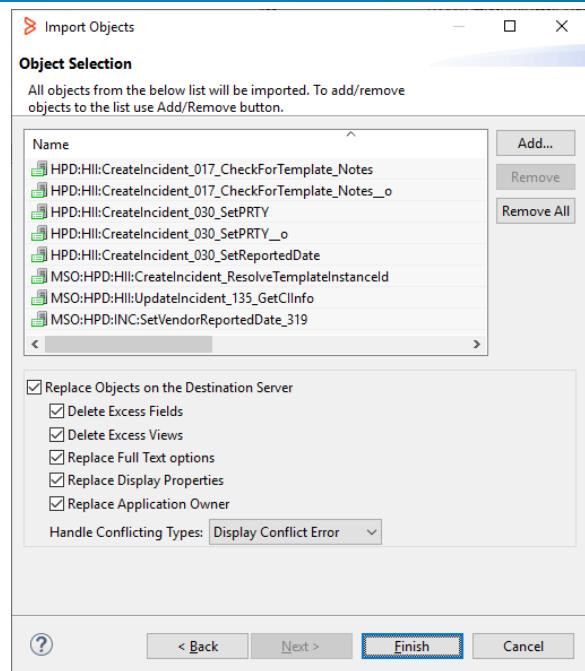


Description of these filters:

CheckForTemplate\_Notes\_o : Correct a bug with the notes field in the create Incident interface

SetPRTY\_o and SetReportedDate : Allow to Set the reported date according to the received time of the email

ResolveTemplateInstanceID : Resolve template ID to template instance ID



Repeat the “**import as object**” steps for the following Definition files

✓ Services.def



### Note

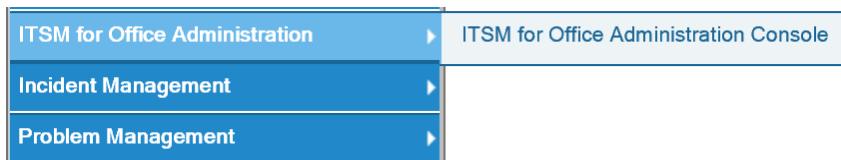
In case of updating the Server Component it is recommended at this stage to **Flush the MidTier Cache** as well as the local Browser cache to properly take new definitions into account.

## 4. Building the ITSM4Office Overview Console

### Required Permission

Administrator role is needed to access this form

In the Applications menu, a new **ITSM for Office Administration** menu will appear, go to the Console.



### Preparation of the MSO Overview Console View (Step 1)

-  Do not (re)build the view using the OOTB "**SHR:Union\_ConfigurationConsole**". Although the Union process use the same supporting forms for fields & mappings, the view build service will use custom workflows.

From the **Install & Setup** menu, click the "**Rebuild Union Overview**" button.

A screenshot of the 'ITSM4Office Administration Console' interface. The title bar says 'ITSM4Office Administration Console'. On the left, there's a sidebar with 'Configuration' expanded, showing 'Install &amp; Setup' (which has a red box around it), 'License', 'General', and 'Matching Rules'. The main area is titled 'Server Component Setup'. It contains three steps: 'Step 1: Initial Union Overview build (View MSO\_OverviewConsole)' with a 'Rebuild Union Overview' button (also highlighted with a red box); 'Step 2: View Form Import (MSO:Union\_OverviewConsole)' with instructions to import 'MSO\_Union\_OverviewConsole.def'; and 'Step 3: Final Union Overview build and Version specific Configuration Update' with a 'Post Install Init' button.

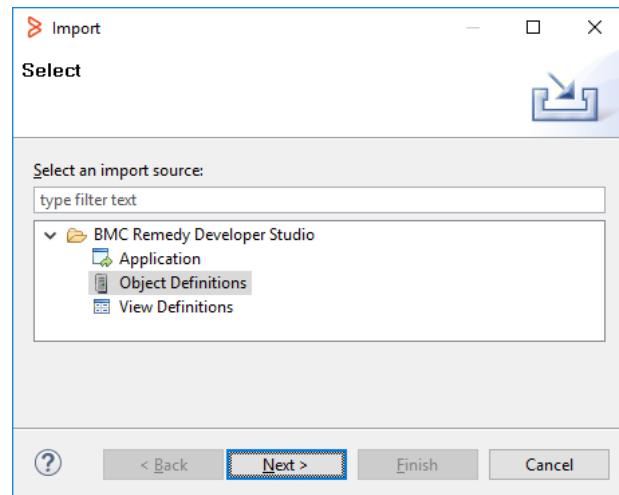
### Note

This action will trigger a (re)build of the **MSO\_OverviewConsole** View **bypassing the Enum** Value conversion. Use this step to rebuild the view if you add custom field mappings & before adding them to the **MSO:Union\_OverviewConsole** Form Overlay.

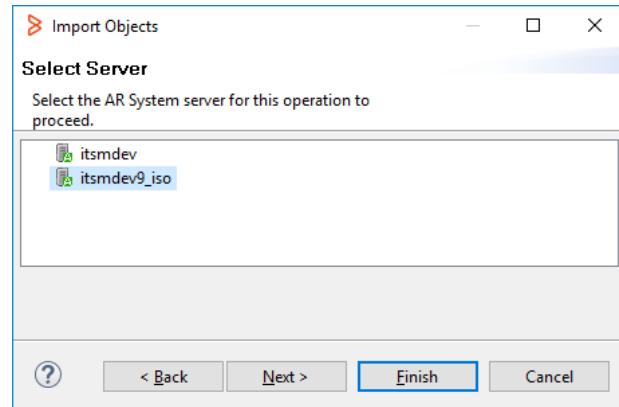
## Import of the MSO:Union\_OverviewConsole definition (Step 2)

From the main menu, select **File > Import** and expand **BMC Remedy Developer Studio**.

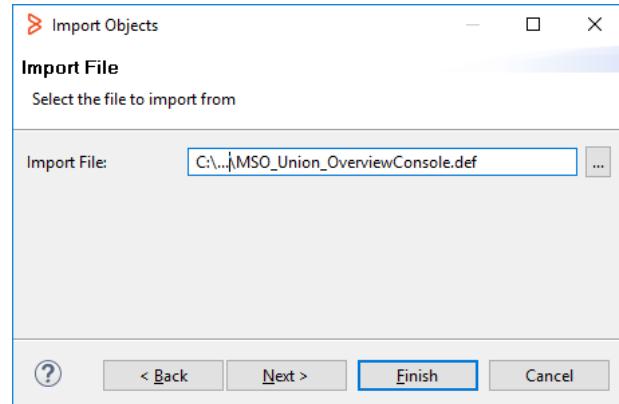
Select **Object Definitions** and click **Next**.



Select **Server Name** and click **Next**.



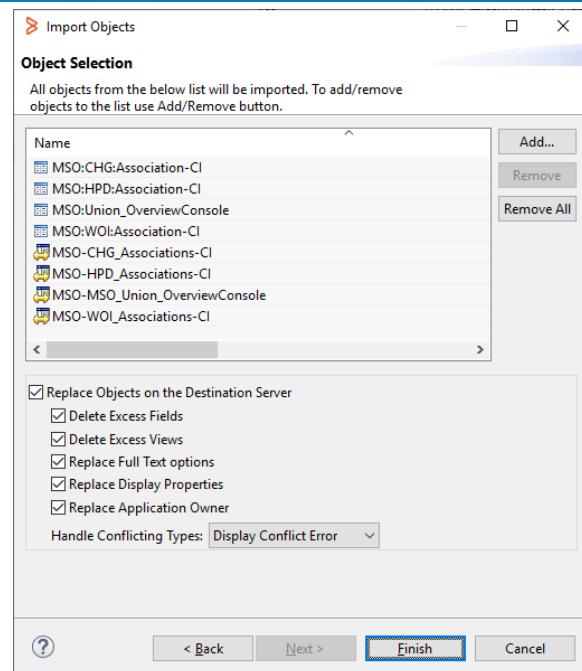
From the appropriate location, select **MSO\_Union\_OverviewConsole.def** file and click **Next**.



Especially in case of a server component update, make sure to select:

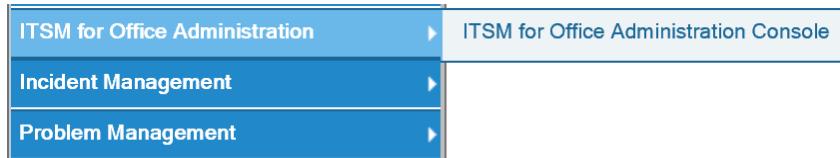
- **Replace objects on the Destination Server**
- **Delete Excess Fields**
- **Delete Excess Views**

and click **Finish**.



## Post install & re-configuration (Step 3)

In the Applications menu, go back to the **ITSM for Office Administration console**.



From the **Install & Setup** menu, click the "**Post Install Init**" button. It will trigger workflows that will perform a version specific initialization of the application.



## Known Errors

[v9.0.x] ERROR (168) / ERROR (412) **after importing ITSM4Office App for v9.0.x.def (Upgrade v1 to v2)**

- i** More information about the Overview Console Customization can be found on BMC Docs:

<https://docs.bmc.com/docs/display/public/itsm81/Extending+the+Overview+console>

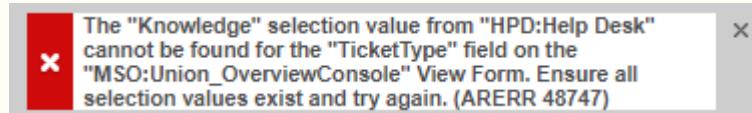
The customization process remains the same and only the view build service differs. Just remember to (re)build the View using the **Install and Setup** Menu.



### Note (ARERR 48747)

During the Post Install, a **second pass rebuild** of the **MSO\_OverviewConsole** View will be done, this time triggering an **Enum Value Conversion**.

Enum Value Conversion can sometime give error if custom enum fields were added. Enum Values will need to be updated accordingly in the **MSO:Union\_OverviewConsole** form overlay to match the source form values.



It is recommended to avoid enum fields and to use regular character fields instead (Field Type 4).



Build/Rebuild of database union structure complete. (ARNOTE 48759)

## 5. Server License configuration (Optional)

**(i)** This Step is for PRO & Enterprise subscription only

In the **License** Tab, copy the license that was provided into the **Server License** field then **Save**.

The screenshot shows the ITSM4Office Administration Console interface. On the left, there's a navigation sidebar with 'Flush Client Cache' at the top, followed by a 'Configuration' section with 'License' selected, and 'General' and 'Matching Rules' options below it. The main content area is titled 'ITSM4Office Licensing'. It displays two sections: 'User Licenses in use' (0) and 'Device Licenses in use' (0). Below these, the 'Server License' field contains a large, complex string of characters, which is the provided license key. At the bottom right of the main area is a 'Save' button.

## Smart IT configuration (Optional)

If you are using Smart IT, you can configure the URL in the **Smart IT web path** field under **General**, then **Save** the configuration.

The screenshot shows the ITSM4Office Administration Console interface. On the left, there's a navigation sidebar with 'Flush Client Cache' at the top, followed by a 'Configuration' section with 'General' selected, and 'License' and 'Matching Rules' options below it. The main content area shows the 'General' configuration settings. It includes a 'Smart IT Web Path' field containing the URL 'http://demo.itsm4outlook.com/ux/smart-it/'. Below this are three dropdown fields for timeouts: 'SendTimeout (s)' set to 30, 'ReceiveTimeout (s)' set to 60, and 'GetListPageSize' set to 1000. At the bottom right of the main area is a 'Save' button.

# Known Errors

[v9.0.x] ERROR (168) / ERROR (412) after importing ITSM4Office App for v9.0.x.def

Message	Code
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:CustomUnionBuildServices	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:Data:ViewDefinitionsLocalized	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:UserRegistry	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:CustomUnionBuildServices	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:Data:ViewDefinitionsLocalized	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:Application Profile	168
✖ One of the field/assignments in the set filter/active link/escalation definition is invalid; ITSM4Office:Application Profile	168
✖ The import file is in an incorrect format; MSO:UCC:SourceFormLoop_BuildViewSQL_DropView`!	412
✖ The import file is in an incorrect format;	412
✖ The import file is in an incorrect format; MSO:UCC:SourceFormLoop_BuildViewSQL_CreateView`!	412
✖ The import file is in an incorrect format;	412
✖ The import file is in an incorrect format; MSO:UCC:RebuildUnionSvc_DropUnionView`!	412
✖ The import file is in an incorrect format;	412
✖ The import file is in an incorrect format; MSO:UCC:RebuildUnionSvc_CreateUnionView`!	412
✖ The import file is in an incorrect format;	412

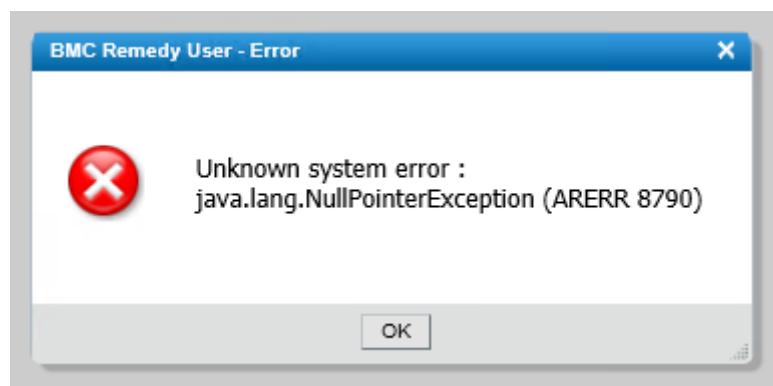
Though the ERROR (168) could be ignored, ERROR (412) will result in the following missing filters.

- ✓ MSO:UCC:SourceFormLoop\_BuildViewSQL\_DropView`!
- ✓ MSO:UCC:SourceFormLoop\_BuildViewSQL\_CreateView`!
- ✓ MSO:UCC:RebuildUnionSvc\_DropUnionView`!
- ✓ MSO:UCC:RebuildUnionSvc\_CreateUnionView`!

## ✓ Solution

Import as 'Object Definitions' the "**CustomUnionBuildServices.def**".

[v9.0.x] ERROR (168) / ERROR (412) after importing ITSM4Office App for v9.0.x.def (Upgrade v1 to v2)

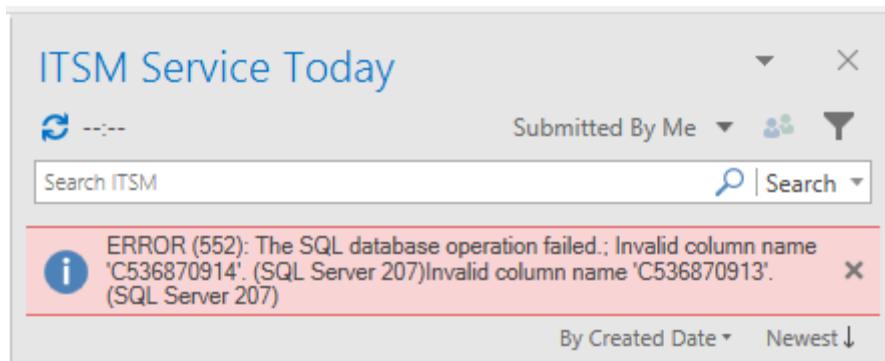


### ✓ Solution

Restart the **BMC Remedy Action Request System Server** (ARS) Service(s)

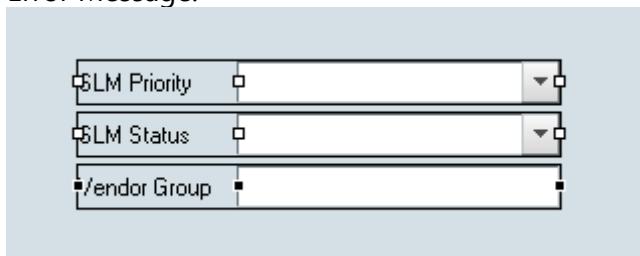
## ERROR (552) with the MSO:Union\_OverviewConsole

**!** ERROR (552): The SQL database operation failed.; Invalid column name 'C536870914'. (SQL Server 207) Invalid column name 'C536870913'. (SQL Server 207)

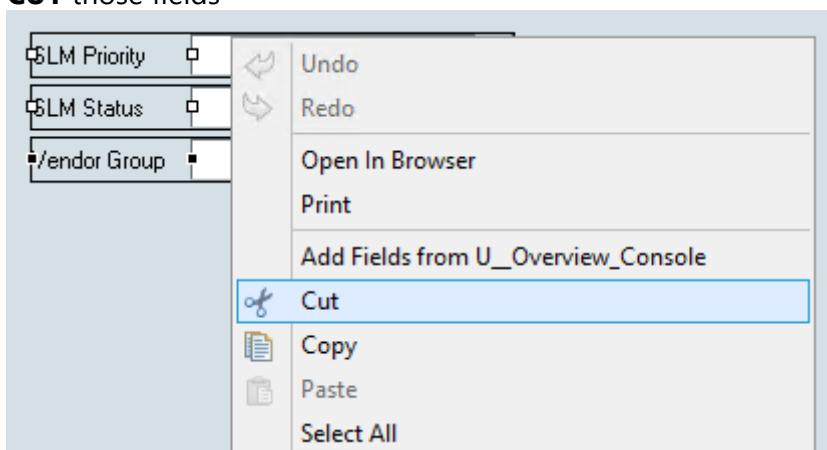


It might happen that the Union **Overview Console customization** fails with this error, especially in case of update when using Overlays. A simple workaround is to proceed as follow:

1. From Developer studio, open the "**MSO:Union\_OverviewConsole**" in best Practice Mode.
2. **Locate and select** the problematic Custom Fields using the Columns IDs of the Error Message.



3. **CUT** those fields



4. **Save** the form Overlay

5. **PASTE** back the Fields



6. **RE-SAVE** the Form Overlay

*Error should be gone and fields properly linked to the View.*

# Central Configuration Management

## 1. ITSM Server Configuration using Registry (i.e. GPO)

To provide a more seamless integration in a Windows domain environment the ITSM Server configuration can be push to the clients using registry entries via a GPO or any other deployment tool with registry capabilities. You will find bellow a simple configuration example.

- i** You can add as many servers as needed in the global configurations. Just make sure to provide each Server Item with a different **global unique identifier**. GUID can be easily generated using an online GUID generator for example.

Description	Action	Hive	Key	Value Name	Type	Value Data Example
AR Server Name	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	ARServer	REG_SZ	itsmdev9
Item Order	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	(default)	REG_DWORD	0
Friendly Name	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	Name	REG_SZ	ITSM Prod
Scheme	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	Scheme	REG_SZ	https
Server Type	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	Type	REG_DWORD	0
URL	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	URL	REG_SZ	itsm.demo.itsm4outlook.com
Authentication	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	Authentication	REG_DWORD	1
User ID Format	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	Login	REG_DWORD	0
User ID Transformation	Update	HKEY_CURRENT_USER	SOFTWARE\ITSM4Office\Servers\<GUID>	UserIDTransformation	REG_DWORD	5

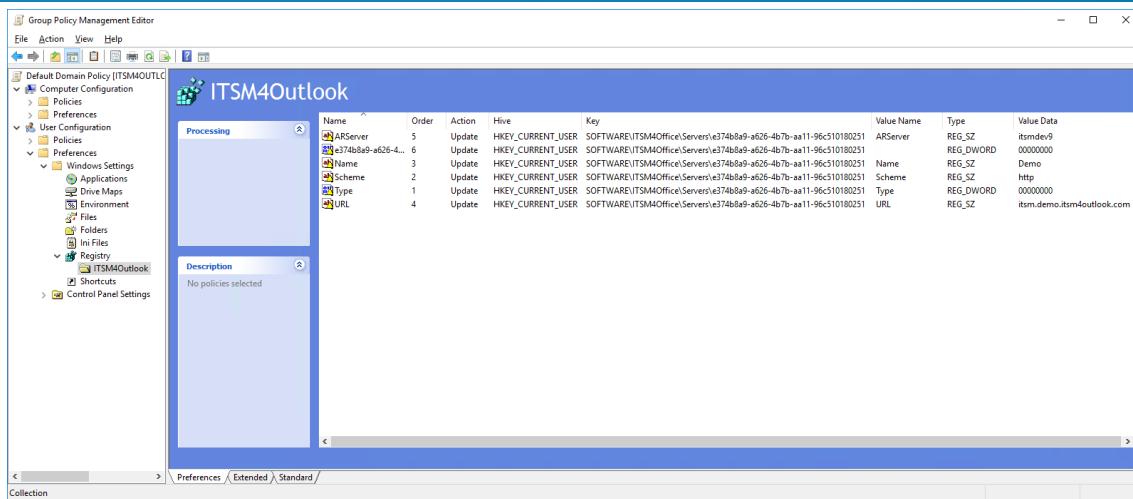
Authentication Types	
0	Unknown
1	Password
2	RSSO

Login Format Types	
0	Default
1	sAMAccountName
2	userPrincipalName
3	Domain\Username
4	mail

UserID Transformations	
0	None
1	RemoveBMCDomain
2	RemoveDomain
3	RemoveEmailDomain
4	ToLowerCase
5	ToUpperCase

### **Note**

Starting with Client version 2.1.7167.31338, global server configuration can also be pushed to the **HKLM** (HKEY\_LOCAL\_MACHINE).



## 2. Add resiliency logic to prevent the ITSM4Outlook Add-in being disable

Outlook's resiliency logic, which was introduced with Outlook 2013, monitors add-in performance metrics such as add-in startup, shutdown, folder switch, item open, and invoke frequency. Outlook records the elapsed time in milliseconds for each performance monitoring metric.

The resiliency logic is triggered when one of the Performance criteria is exceeded and determine if an add-in should be disable.

### Registry

To work around the resiliency logic, one can use registry entries to add the add-in to the trusted addins list or a Group Policy Object to deploy the same values that would be generated locally to all the users in the domain:

1. Add a **REG\_SZ** entry called **ITSM4OFFICE.ITSM4OUTLOOK** with a value data of **1** under  
**HKEY\_CURRENT\_USER\SOFTWARE\Policies\Microsoft\Office\1x.0\Outlook\Resiliency\AddinList**
2. Set the **LoadBehavior** (US English spelling!) **dword** value to **3** under  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\Outlook\Addins\ITSM4OFFICE.ITSM4OUTLOOK**
3. **Delete** the **HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DisabledItems** key

4. Re-create the  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DisabledItems** key
5. **Delete** the  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\CrashingAddinList** key
6. Re-create the  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\CrashingAddinList** key
7. Add a **dword** entry called **ITSM4OFFICE.ITSM4OUTLOOK** with a value of **1** under  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DoNotDisableAddinList**
8. Add a **dword** entry called **ITSM4OFFICE.ITSM4OUTLOOK\dtype** with a value of **0** under **HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\NotificationReminderAddinData**
9. Add a **dword** entry called **ITSM4OFFICE.ITSM4OUTLOOK** with a value of **967a844d** hexdecimal or 2524611661 decimal under  
**HKEY\_CURRENT\_USER\SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\NotificationReminderAddinData**

Where:

- **1x.0** is the office version, for example 15.0 for Office 2013 and 16.0 for Office 2016

**i** The value at point #1 will always enable the add-in but it will also prevent the user from controlling the add-in load behavior. To allow users to control the add-in (enable or disable it from the Outlook user interface), set a value data of "2" instead.

**i** The value at point 9 always enables your add-in until Saturday, January 1st 2050 at 1:01:01 AM.

## GPO (Group Policy Object)

Name	Order	Action	Hive	KeyValue	Name	Type	ValueData
ITSM4Office.ITSM4Outlook	1	Create	HKEY_CURRENT_USER	SOFTWARE\Policies\Microsoft\Office\1x.0\Outlook\Resiliency\AddinList	ITSM4Office.ITSM4Outlook	REG_SZ	1
LoadBehavior	2	Update	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\Outlook\Addins\ITSM4Office.ITSM4Outlook	LoadBehavior	REG_DWORD	3
DisabledItems	3	Delete	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DisabledItems			
DisabledItems	4	Create	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DisabledItems			
CrashingAddinList	5	Delete	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\CrashingAddinList			
CrashingAddinList	6	Create	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\CrashingAddinList			
ITSM4Office.ITSM4Outlook	7	Create	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\DoNotDisableAddinList	ITSM4Office.ITSM4Outlook	REG_DWORD	1
ITSM4Office.ITSM4Outlook	8	Create	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\NotificationReminderAddinData	ITSM4Office.ITSM4Outlook\dtype	REG_DWORD	0
ITSM4Office.ITSM4Outlook	9	Create	HKEY_CURRENT_USER	SOFTWARE\Microsoft\Office\1x.0\Outlook\Resiliency\NotificationReminderAddinData	ITSM4Office.ITSM4Outlook	REG_DWORD	967a844d



For reference and more information:

<https://developer.messaging.azurewebsites.net/2017/08/02/outlooks-slow-add-ins-resiliency-logic-and-how-to-always-enable-slow-add-ins/>

# Server Component Removal



**Before doing any operation on the Remedy platform it is highly recommended to perform a Database Backup to perform a roll back if needed.**

## 1. Remedy Objects Clean-up



### Note

The “**ITSM for Office**” Remedy Application might link to Out of the Box Component like menus for example. **DO NOT BULK REMOVE OBJECT DIRECTLY FROM THE APPLICATION** as you could remove critical OOTB components.

From the BMC Developer studio > **All Objects > Forms**

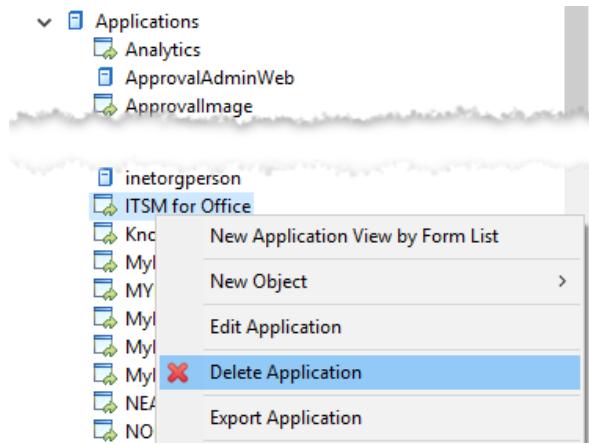
- ✓ Search for all object **starting with “ITSM4Office” & “MSO”**
- ✓ Select them all and Delete them.

Name	Type	Modified	Access Point	Custc
ITSM4Office:Application Profile	Regular	5/30/2017 7:14:51 PM	No	Unm
ITSM4Office:CHG:ChangeInterface	Join	3/16/2017 6:45:38 AM	No	Unm
ITSM4Office:CHG:TemplateQueryInterface	Join	5/30/2017 7:14:58 PM	No	Unm
ITSM4Office:CTM:SprtGrpFunRoleLookup_SvcCpySp	Join	2/18/2017 8:13:45 PM	No	Unm
ITSM4Office:CTM:Support Group Assoc LookUp Pe	Join	5/30/2017 7:15:01 PM	No	Unm
ITSM4Office:CTM:SupportGroupFuncRoleLookUpPe	Join	5/30/2017 7:15:01 PM	No	Unm
ITSM4Office:Data:ClientScript	Edit	5/30/2017 7:14:51 PM	No	Unm

Repeat the operation for the other objects:

- Active Links
- Filters
- Escalations
- Active Link Guides
- Filter Guides
- Web Services
- Menus

Once all the relevant objects are removed you can delete the "**ITSM for Office**" Remedy Application:



## 2. Overview Console Clean-up

1. Browse the forms bellow and remove all record pointing to the "**ITSM4Office Overview Console**" Implementation Area.
  - SHR:Union\_DataSource\_FieldMappings
  - SHR:Union\_DataSource\_Fields
  - SHR:Union\_DataSource\_Forms
  - SHR:Union\_DataSource\_UsedBy
2. At the DB level, drop all the "U\_MSO\_%" Views

