



XRN4931 – Submission of a Space in Mandatory Data on Multiple SPA Files

Shipper Decision on Available Options

Change Overview

XRN4931 – Submission of a Space in Mandatory Data on Multiple SPA Files

The change has been raised to handle the files going back out from SAP into AMT with rejection details when a 'space' is received in the mandatory field. Xoserve are receiving some inbound files (MSI, EMC, CNF, UMR, UBR, UDR, and SFN) with a Space populated in mandatory text fields instead of the required data item (e.g. Y/N). As 'Space' is an allowable ASCII value, AMT has not rejected the inbound file, however, once SAP has carried out its lower-level validation it is unable to 'play back' the data in the appropriate rejection file, as Space is not populated in the data item and is treated as a null value the outbound rejection file is rejected by AMT as not having all mandatory data items populated.

To enable shipper users to receive the rejection a new identifier is required whenever a 'space' is received in inbound mandatory text fields. The solution is that whenever SAP PO receives a 'space' in any mandatory text fields it will be replaced with a special character, SAP ISU will identify the special character generated by SAP PO and a mandatory field missing rejection will be raised from SAP ISU in the outbound file.

This will ensure that 'space' is populated in outbound files in SAP PO only for the cases where space is received in inbound files in mandatory text fields from AMT. This will also ensure that space will not be populated in the fields of outbound interfaces in SAP PO which were generated because of processing issues or any data issues from SAP ISU. List of fields which are considered in scope are as attached:



**XRN4931_Listoffi
elds**

Solution Options Identified

1

Replace the spaces received in the mandatory field of inbound files with single special character in SAP PO then SAP ISU will identify the special character and mandatory field missing rejection will be sent in outbound files.

2

Replace the spaces received in the mandatory field of inbound files with same number of special character(s) in SAP PO then SAP ISU will identify the special character and a mandatory field missing rejection will be sent in outbound files.

Option 1 - High Level Impact Assessment

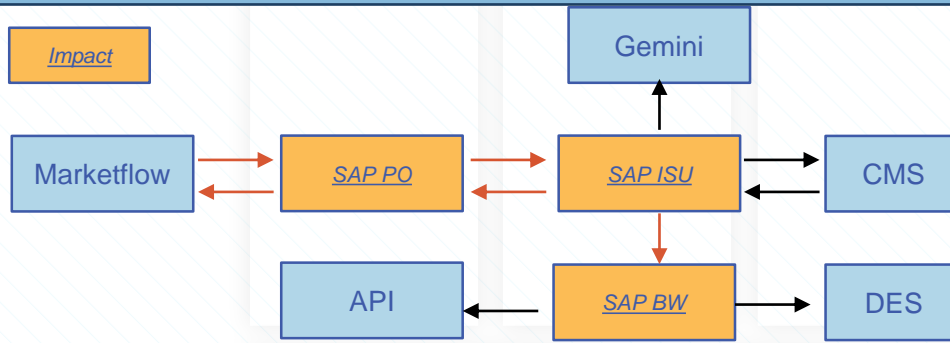
1 - Replace the spaces received in the mandatory field of inbound files with single special character in SAP PO. SAP ISU will identify the special character and mandatory field missing rejection will be sent in outbound files.

SAP PO: For the inbound files (MSI, EMC, CNF, UMR, UBR, UDR and SFN), in SAP PO the mandatory text fields will be identified, if single or multiple spaces are received in SAP PO then replace that space with a single special character (Θ) and send it to SAP ISU. When SAP ISU plays back the special character (Θ) in the outbound files (MSO, CTR, CFR, URS and SFR), SAP PO will replace the special character (Θ) present in the mandatory text field with a single space and send it to AMT Marketflow.

SAP ISU: Code changes to relevant IDoc processing FMs & Read validation programs to add the validation checks for special character (Θ) to generate rejection messages.

SAP BW/BO: Special character (Θ) will be added to permitted extra characters list in BW to ensure no impacts during data load. Amendments in BO reports which are impacted by the file types in scope.

Impacted Systems



Assumptions

- The scope of the change is limited to File type and Fields mentioned in IA sheet.
- Existing rejection codes will be utilised by programs to generate the rejection messages.
- The special character theta (Θ) is not expected to be received in the files that are in scope. In the case of theta (Θ) received in mandatory fields from shipper, the inbound file will be rejected by ISU and PO will replace the values with 'space'.
- Solution option 2 was agreed and recommend for further analysis as part of Nov20 impact assessment. Solution option 1 is not preferred on account of Shippers could not receive same values in rejected response files that was sent in inbound.
- Data cleansing of any outstanding file failures not in scope of this change.
- Performance testing considered in scope for changes in SAP PO.

Overall Impact	Release Type	High Level Cost Estimate
High	Minor	£ 55,000 to £ 65,000 GBP

Option 1 - System Impact Assessment

	Reports	Enhancements	Data Migration	Integration(SAP PO)
System Component:	SAP BW/BO	SAP ISU	SAP ISU	Integration
Impacted Process Areas:	BW Extraction and Reports	SPA, Metering	N/A	File Transfer
Complexity Level (per RICEFW item):	Medium	Medium	N/A	High
Change Description:	<ul style="list-style-type: none"> Addition of Special character to the permitted characters list in BW. Amendments to SHPP_Class3_Mod700 and other impacted BO reports 	<ul style="list-style-type: none"> Code changes required in File processing Functional modules and Read validation programs. 	N/A	<ul style="list-style-type: none"> Use SAP PI node function to replace the field values for inbound & outbound files

	ISU	BW/BO	PO	AMT Marketflow
Test Data Prep Complexity:	Medium	Medium	Medium	Low
Unit and Sys Test Complexity:	Medium	Medium	Medium	Low
Pen Test Impact:	Low	Low	Low	No
Regression Testing Coverage:	Medium	Medium	Medium	Low
Performance Test Impact:	No	No	Yes	No
Market Trials:	No	No	No	No
UAT Complexity:	High	Medium	High	Low

Option 1 - Process Impact Assessment

Process Area	Complexity	File Formats	Exceptions	External Screens	Batch Jobs	Performance Test?	CSS Code Conflicts
SPA	Medium	No	No	No	No	No	No
Metering (Reads)	High	No	No	No	No	No	No
Reconciliation	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Invoicing – Capacity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Invoicing – Commodity	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Invoicing – Amendment	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Invoicing – Other	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Rolling AQ	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Formula Year AQ	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RGMA	N/A	N/A	N/A	N/A	N/A	N/A	N/A
DSC Service	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Other (BW/BO/BODS)	High	No	No	No	No	No	No

Option 2 - High Level Impact Assessment

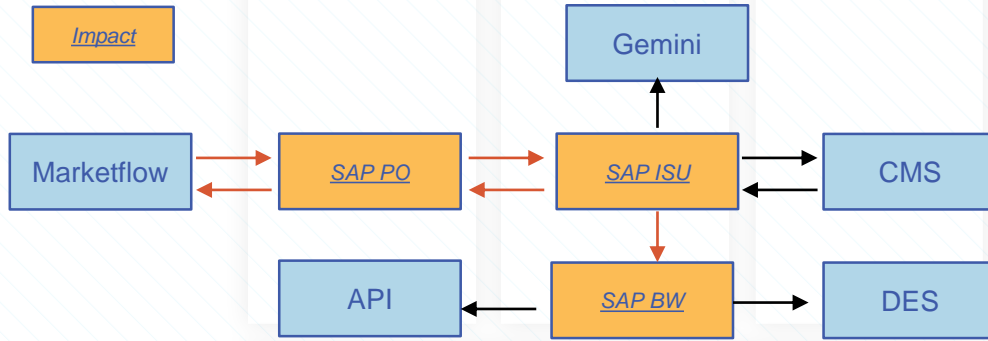
2 - Replace the spaces received in the mandatory field of inbound files with same number of special character(s) in SAP PO then SAP ISU will identify the special character and a mandatory field missing rejection will be sent in outbound files.

SAP PO: For the inbound files (MSI, EMC, CNF, UMR, UBR, UDR and SFN), In SAP PO we will check the mandatory text fields and replace the spaces with the equal number of special character (Θ) and send it to SAP ISU. When SAP ISU will play back the special character (Θ) in the outbound files (MSO, CTR, CFR, URS and SFR), SAP PO will replace the special characters (Θ) present in the mandatory text field with the equal number of spaces and send it to AMT.

SAP ISU: Code changes to relevant IDoc processing FMs & Read validation programs to add the validation checks for special character (Θ) to generate rejection messages.

SAP BW/BO: Special character (Θ) will be added to permitted extra characters list in BW to ensure no impacts during data load. Amendments in BO reports which are impacted by the file types in scope.

Impacted Systems



Assumptions

- The scope of the change is limited to File type and Fields detailed in the Impact Assessment sheet.
- Existing rejection codes will be utilized by programs to generate the rejection messages.
- The special character theta (Θ) is not expected to be received in the files that are in scope. In case of theta (Θ) received in mandatory fields from shipper, the inbound file will be rejected by ISU and PO will replace the values with 'space'
- Market trials is not in scope of the change.
- Data cleansing of any outstanding file failures not in scope of this change.
- Performance testing considered in scope for changes in SAP PO

Overall Impact	Release Type	High Level Cost Estimate
Medium	Minor	£55,000 to £65,000 GBP

Option 2 - System Impact Assessment

	Reports	Enhancements	Data Migration	Integration(SAP PO)
System Component:	SAP BW/BO	SAP ISU	SAP ISU	Integration
Impacted Process Areas:	BW Extraction and Reports	SPA, Metering	N/A	File Transfer
Complexity Level (per RICEFW item):	Medium	Medium	N/A	High
Change Description:	<ul style="list-style-type: none"> Addition of Special character to the permitted characters list in BW. Amendments to SHPP_Class3_Mod700 and other impacted BO reports 	<ul style="list-style-type: none"> Code changes required in File processing Functional modules and Read validation programs. 	N/A	<ul style="list-style-type: none"> Use SAP PI node function to replace the field values for inbound & outbound files

	ISU	BW/BO	SAP PO	AMT Marketflow
Test Data Prep Complexity:	Medium	Medium	Medium	Low
Unit and Sys Test Complexity:	Medium	Medium	Medium	Low
Pen Test Impact:	Low	Low	Low	No
Regression Testing Coverage:	Medium	Medium	Medium	Low
Performance Test Impact:	No	No	Yes	No
Market Trials:	No	No	No	No
UAT Complexity:	High	Medium	High	Low

