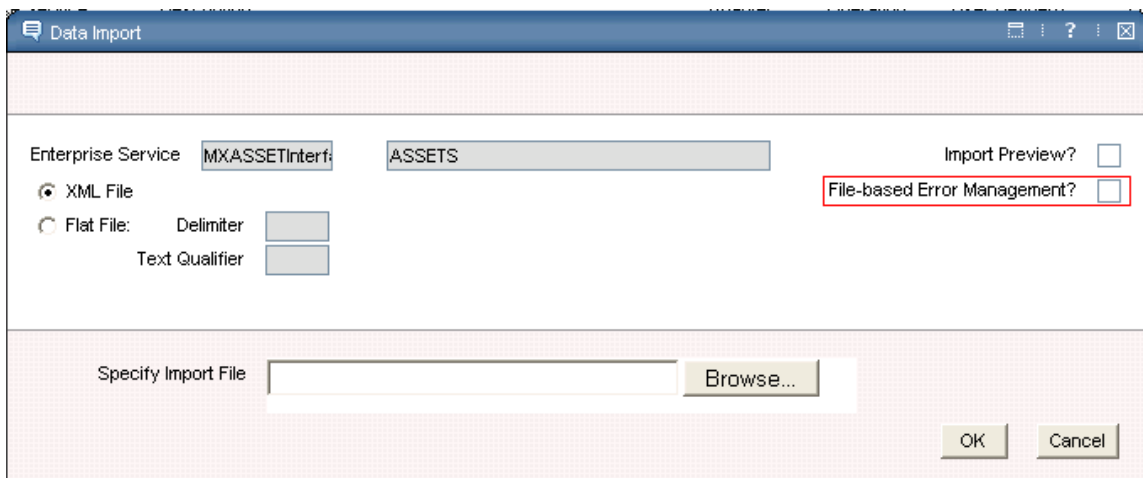


Maximo Integration Framework – Error Extract Functionality

Data Import

The data import functionality provided through the External System application now gives the option of identifying the error management mechanism of your preference. Maximo Base Services v7.1.1.4 fix pack introduces an updated data import dialogue:



The “File-base Error Management” check-box control indicates the error management mechanism to be used by data import process. By default this control is un-checked, hence GUI based error management is applicable: you will be able to search, update and re-try integration messages that are flagged with an error via Maximo’s Message Reprocessing application.

When the “File-based Error Management” check-box control is selected Maximo’s error management process will identify all integration messages flagged with an error and will make them available via a downloadable file.

Data Import

When you check the “File-based Error Management” check-box and leave the Import Preview check-box un-checked, the data import process will execute the same processing logic in place prior the v7.1.1.4 fix pack: a system message, indicating that inbound

messages have been processed successfully to the queue, will be displayed after all messages in your source file are successfully written to the queue.

Maximo v7.1.1.4 fix pack implements inbound processing logic that identifies processing errors on any of the source file's messages and makes these failed messages available via a re-processable file; Maximo's Message Reprocessing application now provides an updated GUI that permits you to download the re-processable file.

NOTE: Selecting the "File-based Error Management" functionality implies that any integration messages flagged with an error will only be available via a re-processable file and not displayed via the Message Reprocessing application GUI.

Import Preview

When you check both the Preview Mode and the File-base Error Management check boxes and initiate the data import process, in addition to the "Preview Results" dialogue Maximo will display a file download dialogue where you will be able to open the re-processable file via a browser screen or to specify a file system location where you want the re-processable file to be saved.

The content of the re-processable file will consist of **ALL** the messages included in the file you just performed the preview operation; messages identified with a processing exception (validation error) will include the corresponding error message description.

After the re-processable file is successfully saved to your file system you will be able to work locally with the file's content and provide the appropriate data updates required to resolve the processing exceptions identified by the preview mode.

After you finish working with all messages, with an error condition, identified in the re-processable file you will be able to perform a Data Import preview action on the updated re-processable file; the Data Import – Preview Mode processing logic has been enhanced to process extracted files without any file structure change.

Data Import Cron Task

Maximo's XMLFILECONSUMER and FLATFILECONSUMER cron tasks now give the option of identifying the error management mechanism of your preference. Maximo Base Services v7.1.1.4 fix pack introduces a new cron task parameter: **ISFILEEXTRACT**.



IFILEEXTRACT	Error management mechanism
0	GUI based error management via Message Reprocessing application
1	FILE based error management

NOTE: Selecting the “File-based Error Management” functionality implies that any integration messages flagged with an error will only be available via a re-processable file and not displayed via the Message Reprocessing application GUI.

Record Processing Retries for File-Based Error Management

Records comprising import files processed via the Data Import or the Data Import Cron Task will be retried up to the maximum number of times determined by the `mxe.int.extracttrycount` property, before being flagged as errors, and made available via the error extract functionality described in the next section.

Property Name	Description	Out of the box value
<code>mxe.int.extracttrycount</code>	The File Extract Retry Count value is the number of times a message in error is retried when using file-based error management during data import or data import cron task	0

Error Management

The Message Reprocessing application has been enhanced to support file-based error management. Maximo Base Services v7.1.1.4 fix pack introduces an updated Message Reprocessing GUI:



Message Reprocessing

Bulletins: (1)Go ToList ReportsStart CenterProfileSign OutHelp

Find:

Select Action

Advanced SearchSave QueryBookmarks

MessagesFilter1 - 4 of 4Download

<input type="checkbox"/>	Queue JNDI name	System	Message ID	Status	Error Message
<input type="checkbox"/>	jms/maximo/Int/queues/cqin	EXTSYS1	1228456073390176295	HOLD	BMXAA4147E - Item set error1 does not exist.
<input type="checkbox"/>	jms/maximo/Int/queues/cqin	EXTSYS1	1228456073406688672	HOLD	BMXAA4147E - Item set error1 does not exist.
<input type="checkbox"/>	jms/maximo/Int/queues/cqin	EXTSYS1	1228456073468466931	HOLD	BMXAA4149E - EA/LENA/XX is not a valid org.
<input type="checkbox"/>	jms/maximo/Int/queues/cqin	EXTSYS1	1228456073484100789	HOLD	BMXAA4149E - EA/LENA/XX is not a valid org.

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Import File	Enterprise Service	External System	Import Date	Imported Count	Processed Count	Error Count	File Format	Available To Extract?
EXTSYS1_MXASSETInterface_1228455097875978890.xml	MXASSETInterface	EXTSYS1	12/5/08 12:35 AM	22	10	1	XML	<input type="checkbox"/>
EXTSYS1_MXASSETInterface_1228455538062994549.dat	MXASSETInterface	EXTSYS1	12/5/08 12:43 AM	2	1	1	FLAT	<input checked="" type="checkbox"/>
SOURCE_MXASSETInterface.xml	MXASSETInterface	EXTSYS1	12/5/08 12:10 AM	10	5	5	XML	<input checked="" type="checkbox"/>
EXTSYS1_MXASSETInterface_1228455097875978890.xml	MXASSETInterface	EXTSYS1	12/5/08 12:36 AM	2	1	1	XML	<input checked="" type="checkbox"/>

The message reprocessing application now includes a section where re-processable files are available for download. The “Error Extract” section consists of the following columns:

Column	Description
Import File	Name of the “source” file from where the re-processable error file was generated.
Enterprise Service	Name of the Enterprise Service used to import the “source” file.
External System	Name of the External System used to import the “source” file
Import Date	Date and time when the data import process initiated processing the “source” file.
Imported Count	Total Number of messages imported from the original source file
Processed Count	Number of messages processed successfully into Maximo
Error Count	Number of messages in Error
File Format	“Source” file’s format
Available To Extract?	Identifies if the inbound processing of the “source” file has completed.
Extract Icon	Action button that initiates the file download process. To assure that the “source” file has been completely processed by the import mechanism, only files where the addition of Error Count and Processed Count is equal to Imported Count will be available for download.
Delete Icon	Action button that deletes the selected record from the “Error Extract” table. Only table records where the addition of Error Count and Processed Count is equal to Imported Count will be available for deletion.

To initiate the download process, follow:

- 1) Identify the source file from which you will be downloading its corresponding errors. The Error Extract table provides detailed record information associated with a source file: file name, processed date time, file's format, etc.
- 2) Verify that the source file has been fully processed by the data import process (Processed Count = Error Count + Processed Count).
- 3) Select the download icon.
- 4) Select the save button from the "Save As" dialogue.
- 5) Provide a file system location to have the re-processable file saved.

Once you have the re-processable file available in your client machine's file system, you will be able to fix processing errors identified in the re-processable file using the file editor of your choice. Updated re-processable files can be re-imported into Maximo without you removing any of the error message description information.

Re-processable file format

Default naming convention provided for the re-processable file is:

<UniqueFileIdentifier>_<OriginalFileName>.<OriginalFileExtension>

When downloaded, the re-processable file will be provided in the same format (delimiter and text qualifier in case you are working with a Flat file format).

To provide the error description associated with each one of the messages included in the re-processable file, additional information is provided:

XML files

Re-processable files that follow an XML file structures will include an additional element in the main MBO of the original Object Structure; for example, a re-processable file



generated based on MXASSET information will include the **MAXINTERRORMSG** element as part of the ASSET elements.

```
<?xml version="1.0" encoding="UTF-8"?>
<SyncMXASSET xmlns="http://www.ibm.com/maximo" transLanguage="EN">
  <MXASSETSet>
    <ASSET>
      <ANCESTOR />
      <ASSETID>94</ASSETID>
      <ASSETNUM>THREE_T2002</ASSETNUM>
      <ASSETTAG />
      <ASSETTYPE />
      ...
      ...
      <WARRANTYEXPDATE>1998-12-24T00:00:00-05:00</WARRANTYEXPDATE>
      <YTD COST>0.0</YTD COST>
      <MAXINTERRORMSG>The following error occurred while processing ASSET.
      BMXAA4147E - Item set error1 does not exist.</MAXINTERRORMSG>
    </ASSET>
    ...
    ...
  </MXASSETSet>
</SyncMXASSET>
```

Flat files

Re-processable files that follow a FLAT file structure will include an additional column; for example, a re-processable file generated based on MXASSET information will include the **MAXINTERROR** column at the end of the original record structure:

```
EXTSYS1,MXASSETInterface,,EN
ASSETNUM,AS_DESCRIPTION,AS_DESCRIPTION_LD,HIERARCHYPATH,AS_SITEID,MAXINTERRORMSG
T-SP500_error,autospray,,,TEXAS,The following error occurred while processing ASSET.
BMXAA4049E - The value specified T-SP500_error exceeds the maximum field length.
```

Re-processable file management

Re-processable files are maintained in a pre-defined location in Maximo's file system; a menu action option has been introduced: **Extract File Management**

This menu action option will allow you to:

- a)Download re-processable files

- b)Download re-processable files no longer available via the Message Reprocessing “Error File” table
- c)Permanently delete a re-processable file from the server’s file system

Extract File Management						
Extract Files						
Import File Name	External System Name	Import File Date	File Format	Extract File Name	Extract File Date	
EXTSYS1_MXASSETInterface_122845538062994549.dat	EXTSYS1	12/5/08 12:43 AM	FLAT	20081205004330_1228455842906346848_EXTSYS1_MXASSETInterface_122845538062994549.dat	12/5/08 12:44 AM	
ACB_MXASSETInterface.xml	EXTSYS1	12/1/08 3:47 PM	XML	20081201154756_1228452116718726974_ACB_MXASSETInterface.xml	12/4/08 11:41 PM	
ACB_MXASSETInterface.xml	EXTSYS1	12/3/08 3:18 PM	XML	20081203151847_1228335528218195366_ACB_MXASSETInterface.xml	12/3/08 3:18 PM	
ACB_MXASSETInterface.xml	EXTSYS1	12/3/08 3:19 PM	XML	20081203151940_1228335581687437446_ACB_MXASSETInterface.xml	12/3/08 3:19 PM	
ACB_MXASSETInterface.xml	EXTSYS1	12/3/08 3:22 PM	XML	20081203152204_1228335725078423239_ACB_MXASSETInterface.xml	12/3/08 3:22 PM	
SOURCE_MXASSETInterface.xml	EXTSYS1	12/5/08 12:10 AM	XML	20081205001037_1228453907062636059_SOURCE_MXASSETInterface.xml	12/5/08 12:11 AM	
EXTSYS1_MXASSETInterface_1228455097875978890.xml	EXTSYS1	12/5/08 12:34 AM	XML	20081205003439_1228455280046713411_EXTSYS1_MXASSETInterface_1228455097875978890.xml	12/5/08 12:34 AM	
EXTSYS1_MXASSETInterface_1228455097875978890.xml	EXTSYS1	12/5/08 12:36 AM	XML	20081205003617_1228455411578502590_EXTSYS1_MXASSETInterface_1228455097875978890.xml	12/5/08 12:36 AM	

Column	Description
Import File	Name of the “source” file from where the re-processable error file was generated.
Enterprise Service	Name of the Enterprise Service used to import the “source” file.
External System	Name of the External System used to import the “source” file
Import Date	Date and time when the data import process initiated processing the “source” file.
File Format	“Source” file’s format
Extract File Name	Name of the re-processable file
Extract File Date	Date of the last download of the re-processable file
Extract Icon	Action button that initiates the file download process.
Delete Icon	Action button that deletes the selected record from the “Error Extract” table. This action PERMANENTLY deletes the re-processable file.

To initiate the download process, follow:

- 1) Identify the re-processable file you will be downloading

- 2) Select the download icon.
- 4) Select the save button from the “Save As” dialogue.
- 5) Provide a file system location to have the re-processable file saved.

Once you have the re-processable file available in your client machine’s file system, you will be able to fix processing errors identified in the re-processable file using the file editor of your choice. Updated re-processable files can be re-imported into Maximo without you removing any of the error message description information.

To initiate the delete process, follow:

- 1) Identify the re-processable file you will be deleting
- 2) Select the delete icon.

The delete action will permanently remove the re-processable file from Maximo’s file system.

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