

SID-RefreshTM

User Guide v.1.4.9

SID-RefreshTM is designed to simplify, automate, and optimize the process of updating the technical data and configuration in SAP systems.



For questions and other concerns, e-mail us at: sidrefresh@itconductor.com



Version History

Version	Release Date	Description
1.4.9	02/18/2022	Update
		Removed 12 tables from the Users (SU01) task
		Fix
		 Fixed "Export Tasklist failed in ALECUST, TMS steps with RC12"
		 Fixed "Export Tasklist failed in CRM_ERMS step with RC8"
		Fixed "Clean Tasklist failed in WEBSERVICE steps with RC8"
1.4.8	01/05/2021	Update
		Added 12 tables to the Users (SU01) task
1.4.7	10/17/2019	New
		Added new batch mode execution switch -b that enables batch logging to standard output
1.4.6	06/28/2019	New
		Added the SAML2 Configuration task
		Added the OAuth Client Configuration task
		Added the OAuth Server Configuration task
		Added the Relationship Service Configuration task
		Added the CRM E-mail Response Mngmt System Configuration task
		Update
		Added 4 tables to the ALE Customizing task
		Added 6 tables to the SAP NetWeaver LDAP Configuration (LDAP) task
		Added 15 tables to the SAP Unified Connectivity (UCON) task
		Added 1 table to the HTTP Service Configuration (SICF) task
		Removed 2 tables from the Archiving ADK Configuration task



		 Removed 4 tables from the Batch Jobs (SM37) task Removed 1 table from the RFC Connections (SM59) task Removed 1 table from the Secure Store (SECSTORE) task Removed 1 table from the Users (SU01) task Removed 2 tables from the Integration Engine Configuration (SXMB_ADM) task
1.4.5	04/21/2019	Fix
		Fixed NullPointerException if the License Key doesn't contain SID Attribute
1.4.4	09/10/2018	New
		Added license generation notice
		Fix
		Fixed invalid license key if there is a newline in the license file
1.4.3	07/12/2018	New
		Added license check function
		Fix
		Fixed problems with the text progress bar
1.4.2	05/21/2018	New
		Added the function of collecting diagnostic information for support
		Fix
		Fixed problems with export tasks
1.4.1	05/01/2018	New



- Added the SAP Office Number Range for Attachment (SBWP) task
- Added the **Users** (**SU01**) task
- Added the **SAP Gateway Configuration** task
- Added the **SAP Unified Connectivity(UCON)** task
- Added the SAP NetWeaver Enterprise Threat Detection (ETD) task
- Added the SAP Screen Personas Configuration for S/4HANA
- Added the SAP NetWeaver Switchable Authorization Checks (SACF) task

Update

- Changed the SAP NetWeaver Workflow
 Configuration (SWU3) task to SAP NetWeaver
 Workflow Configuration (SWU3) and SAP
 NetWeaver Workflow Runtime Data (SWU3)
- Added the Cleanup of Spool Configuration (SPAD) task for S/4HANA
- Added 4 tables to the Export Archiving ADK Configuration task
- Added 14 tables to the **Batch Jobs (SM37)** task
- Added 1 table to the HTTP Service Configuration (SICF) task
- Added 6 tables to the **Security Audit Profile Configuration (SM19)** task
- Added 9 tables to the Trust Manager Configuration (STRUST) task
- Added 1 table to the Test Workbench Configuration (CATT, eCATT, STWB) task
- Added 25 tables to the Integration Engine Configuration (SXMB ADM) task
- Added 3 tables to the SAP NetWeaver Workflow Configuration (SWU3) task for S/4HANA
- Added 1 table to the **Secure Store** (**SECSTORE**) task for S/4HANA
- Added 1 table to the ChaRM/CTS Configuration task
- Removed 2 tables from the ChaRM/CTS Configuration task
- Removed 2 tables from the **ALE Configuration** task



1.4.0	02/21/2018	Removed 1 table from the Archiving Objects Configuration task Removed 2 tables from the SAPconnect Configuration (SCOT) task Note: Support for S/4HANA from release 1610 New
		 Added the Cleanup of Selected ABAP Basis Tables (OTHERS) task Added the GTS Component Configuration task Added the EWM Server Configuration task Added the EWM Interface Configuration task Added the BW Configurations task Update Removed the Users (SU01) task
1.3.0	06/01/2017	 Added the SAP CRM Configuration task Added functionality for the customer-defined tables to be included in export/import
1.2.0	05/01/2017	 Added the expert mode that allows you to clean certain configurations of the refreshed system by deleting their respective data tables such as TempSe tables for spool output, etc. Added functionality for the export of the tables (backup) to be performed prior to cleaning them for the purpose of saving the content (For Safety Precautions) Added functionality for the restoration of the table content prior to clean up Added functionality for the customer-defined tables to be added to the cleanup configuration (Precaution: Customer must be aware and accept full responsibility for cleaning table contents in the refreshed system.)



1.1.0	03/01/2017	Initial release of SID-Refresh TM with multiplatform support for Windows/Linux/Unix and all SAP-supported databases



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I. Product Overview

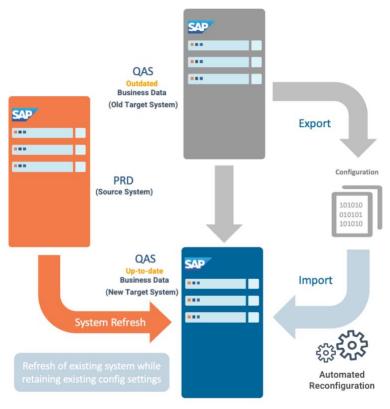


Figure 1: System Refresh Process

A. Background

System copy and system refresh are fundamental administrative tasks in SAP landscapes. In situations where you need to change your operating system, your database, or perhaps, you want to build an entirely new system based on an existing system, you need to perform system copy. If you want to set up a sandbox system for testing and demo purposes, a system copy is also performed. While system refresh is closely related to system copy, it basically involves more than just copying one system to another. When you refresh a system, you overwrite an existing target system with the latest data from a source system while maintaining the configuration.

The challenge now is how system refresh requires several steps, that when performed manually, can be tedious and time-consuming as it requires at least 20 hours to perform. Depending on the complexity of your systems, system refresh can



even take up to several days to complete. Given SAP's recommendation to perform system refresh at least once every quarter, it would be a great relief to have an automated solution in place and remove the burden of having to manually process them four times a year, or probably more.

B. Product Description

SID-RefreshTM is a tool developed to automate the end-to-end process of system refresh. It is designed to simplify, automate, and optimize the process of updating the technical data and configuration in SAP systems.

C. High-Level Process

The system refresh process shown in Figure 1 depicts the creation of a new system with its own identity as a copy from the source system and the refresh of an existing system while retaining the existing configuration settings.



Figure 2: System Refresh High-Level Process



SID-RefreshTM exports the target system tables that contain configuration information before system refresh is started and imports them afterward.

The typical task list runs in the following sequence:

• Export System Configuration

The connection-related configuration data is exported as table content for the file system using R3trans.

• Copy SAP System

The database of the production system is copied into the quality system.

• Rename Cloned SAP System

The copied system is renamed with the same SID as the old target system.

• Clean System Configuration

The contents of the tables that contain information about the source system will be cleaned up.

• Import System Configuration

The connection-related configuration data in the form of table content is imported back to the new target system using R3trans.

• Conversion of Logical System Names (BDLS)

When logical system names are duplicated, you have to convert them to have unique IDs again. To convert one or more logical system names to new or existing logical names, transaction BDLS is used.

Note: The Copy SAP system, Rename Cloned SAP System, and Conversion of Logical System Names can be automated using a separate "Automation as a Service" feature in IT-Conductor cloud platform.



D. Product Features

Refresh of **SAP CRM** systems exports and imports configuration tasks for refreshing SAP CRM, related to connectivity inside target system or to systems outside. Only for refreshing one isolated systems — related systems are not changed.

The following is an overview of configuration tasks in SAP CRM:

- Export CRM Middleware Configuration
- Export CRM Component Configuration
- Export CRM WebClient Configuration
- Import CRM Middleware Configuration
- Import CRM Component Configuration

Refresh of **SAP EWM** systems exports and imports configuration tasks for refreshing SAP EWM, related to connectivity inside target system or to systems outside. Only for refreshing one isolated system, related systems are not changed.

The following is an overview of configuration tasks in SAP EWM:

- Export EWM Server Configuration
- Export EWM Interface Configuration
- Import EWM Server Configuration

Refresh of **SAP GTS** systems export and import configuration tasks for refreshing SAP GTS. It is related to connectivity inside the target system or to systems outside. Only for refreshing one isolated system, related systems are not changed.

The following is an overview of configuration tasks in SAP GTS systems:

- Export GTS Component Configuration
- Import GTS Component Configuration

Refresh of **SAP SCM** systems exports and imports configuration tasks for refreshing SAP SCM. It is related to connectivity inside target system or to systems outside. Only for refreshing one isolated system. related systems are not changed.

The following is an overview of configuration tasks in SAP SCM:

• Export SCM Basis Integration Configuration



- Export SCM Server Integration Configuration
- Import SCM Basis Integration Configuration
- Import SCM Server Integration Configuration

Refresh of **SAP SRM** systems exports and imports configuration tasks for refreshing SAP SRM. It is related to connectivity inside the target system or to systems outside. Only for refreshing one isolated system, related systems are not changed.

The following is an overview of configuration tasks in SAP SRM:

- Export SRM Component Configuration
- Import SRM Component Configuration

The result is a quality system with the production system's 'business data' and the original 'technical data and configuration' of the quality system.

As already mentioned, the program does not require additional hardware, there is no complex installation and configuration.

Below is a list of 'technical data and configuration' that may be exported/imported using SID-RefreshTM. Note that selected options are saved on initial use and can be reused on subsequent execution of the refresh.

- 1. ALE Configuration
- 2. ALE Customizing
- 3. Archiving ADK Configuration
- 4. Archiving Customizing Configuration
- 5. Archiving Objects Configuration
- 6. Batch Jobs (SM37)
- 7. Report Variants
- 8. Batch Server Groups (SM61)
- 9. CCMS Configuration (RZ20, RZ21)
- 10. CCMS History
- 11. DBA Cockpit Configuration (DBACOCKPIT)
- 12. Additional DBA Cockpit Config. for Oracle
- 13. Operating System Commands (SM69)
- 14. Cross-Client File Names/Paths (FILE)
- 15. SAP License (SLICENSE)
- 16. Logon Groups (SMLG)
- 17. Operation Modes (RZ04)



- 18. Spool Configuration (SPAD)
- 19. System Profiles (RZ10)
- 20. RFC Connections (SM59)
- 21. RFC Inbound Queue Configuration (SMQ2)
- 22. RFC Outbound Queue Configuration (SM58, SMQ1)
- 23. Background RFC (SBGRFCMON)
- 24. SLD Data Supplier Configuration (RZ70)
- 25. SAPconnect Configuration (SCOT)
- 26. SAP Office Configuration (SBWP)
- 27. SAP Office Number Range for Attachments (SBWP)
- 28. HTTP Service Configuration (SICF)
- 29. SLD Access Data Configuration (SLDAPICUST)
- 30. Update Program Administration (SM14)
- 31. Security Audit Profile Configuration (SM19)
- 32. Trust Manager Configuration (STRUST)
- 33. SNC Access Control List (STRUSTSSO2)
- 34. TMS Configuration (STMS)
- 35. TMS Quality Assurance Configuration (STMS)
- 36. Version Management
- 37. Virus Scan Definitions (VSCAN)
- 38. Web Service Configuration (SOAMANAGER)
- 39. Users (SU01)
- 40. Test Workbench Configuration (CATT, eCATT, STWB)
- 41. Internet Transaction Server Config. (IACOR, ITS)
- 42. Project Customizing (SPRO)
- 43. Client Configuration (SCC4)
- 44. Integration Engine Configuration (SXMB_ADM)
- 45. SolMan Configuration in Managed System
- 46. ChaRM/CTS Configuration
- 47. Service Data Control Center Configuration (SDCCN)
- 48. Service Data Control Center Download Data (SDCCN)
- 49. Login Screen Information
- 50. Initial Screen Configuration (SMW0)
- 51. Lock/Unlock Users (EWZ5)
- 52. Batch-Input Data and Configuration (SM35)
- 53. SAP NetWeaver Workflow Configuration (SWU3)
- 54. SAP NetWeaver Workflow Runtime Data (SWU3)
- 55. SAP NetWeaver LDAP Configuration (LDAP)
- 56. Secure Store (SECSTORE)
- 57. Customer Defined Configuration Tables (CUSTOMER)



- 58. SAP Gateway Configuration
- 59. SAP Screen Personas Configuration
- 60. SAP Unified Connectivity (UCON)
- 61. SAP NetWeaver Enterprise Threat Detection (ETD)
- 62. SAP NetWeaver Switchable Authorize Checks (SACF)
- 63. SAP NetWeaver Maintain Whitelists (SLDW)
- 64. CRM Middleware Configuration
- 65. CRM Plug-In Configuration (CRM/ERP)
- 66. CRM Integration in ERP
- 67. CRM Component Configuration
 - CRM Analytic Component Configuration
 - CRM Interaction Center Component Configuration
 - CRM Marketing Component Configuration
 - CRM Miscellaneous Component Configuration
 - CRM Field Applications (Mobile) Component Configuration
 - CRM Sales Component Configuration
 - CRM Partner Channel Management Component Configuration
 - CRM Service Component Configuration
 - CRM Web Channel Enablement Component Configuration

68. CRM WebClient Configuration

- Define transaction launcher and IC WebClient
- Communication Management Software Connections

69. SRM Component Configuration

- Technical Basic Settings
- Settings for Supplier Synchronization
- Activate Users

70. SCM Basis Integration Configuration

- Activation of Incremental Data Transfer
- Distribution Definition Maintenance
- Generation of Distribution Definitions



- Maintain Business System Group
- Assignment of Logical System and Queue Type
- Activation of CIF Error Handling
- Assignment of RFC Destinations to Application Cases
- User Parameters
- 71. SCM Server Integration Configuration
- 72. Remote Control and Communication Framework Configuration
- 73. SCM Configuration in ERP
 - Basic Settings for Setting Up the System Landscape
 - Basic Settings for the Data Transfer
 - Application-Specific Settings and Enhancements

74. GTS Component Configuration

- SAP Compliance Management
- SAP Customs Management
- SAP Risk Management

75. EWM Server Configuration

- Master Data Settings
- Batch Management
- Goods Issue Process (Work Center)
- Printer Settings
- Others Settings

76. EWM Interface Configuration RFID

- Settings mandatory
- General Settings for ERP mandatory
- General Settings for ERP
- Delivery Processing for ERP
- Goods Movement
- Transportation



- General Settings for GTS mandatory
- General Settings for GTS
- Non-SAP Systems
- Availability Check
- Migration from LE-WM

77. BW Configurations

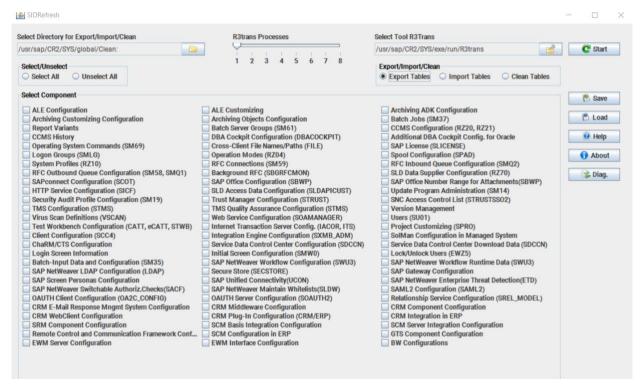


Figure 3: SAP NetWeaver ABAP Technical Configuration Components

Below is a list of technical data and configuration that may be cleaned up using SID-RefreshTM. Note that the selected options are saved on initial use and can be reused on subsequent execution of the refresh.

- 1. Cleanup of CCMS Configuration (RZ20, RZ21)
- 2. Cleanup of CCMS History (CCMSHISTORY)
- 3. Cleanup of DBA Cockpit Configuration (DBACOCKPIT)
- 4. Cleanup of Additional DBA Cockpit Config. for Oracle
- 5. Cleanup of Spool Configuration (SPAD)
- 6. Cleanup of System Profiles (RZ10)
- 7. Cleanup of RFC Inbound Queue Configuration (SMQ2)



- 8. Cleanup of RFC Outbound Queue Configuration (SM58, SMQ1)
- 9. Cleanup of Background RFC (SBGRFCMON)
- 10. Cleanup of SAP Connect Data (SCOT)
- 11. Cleanup of SLD Access Data Configuration (SLDAPICUST)
- 12. Cleanup of TMS Configuration (STMS)
- 13. Cleanup of Web Service Configuration (SOAMANAGER)
- 14. Cleanup of Integration Engine Runtime Data (SXMB_ADM)
- 15. Cleanup of Batch-Input Data and Configuration (SM35)
- 16. Cleanup of Selected ABAP Basis Tables (OTHERS)
- 17. Cleanup of Operating System Monitoring Data (ST03N)

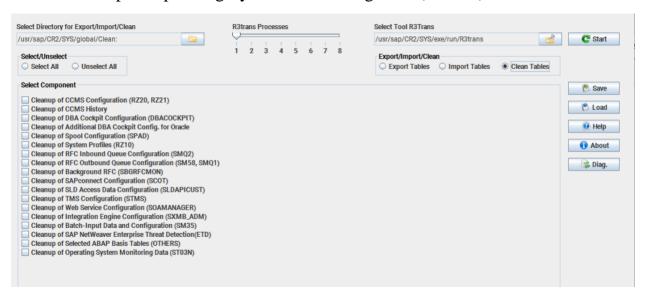


Figure 4: SAP NetWeaver ABAP Technical Configuration Components for Clean Tasks

E. Benefits and Value

The benefits and value provided by **SID-Refresh**TM are the following:

- Additional hardware is not required
- Minimal resources for implementation and operations
- No major changes in the existing landscape
- Easy implementation with minimal process
- Can be deployed on platforms that use different operating systems and databases
- Automated process
- Minimizes downtime
- Increased integrity



Below are the average savings we saw in the field for customers who benefited from pre and post-copy automation per system refresh. Note that the actual database copy is not included because that depends on the size of the customer's system and the platform/technology used. The manual process varied based on the complexity of the system due to the number of jobs, connections, profiles, etc., while the **SID-Refresh**TM the automated process remained consistent each time regardless of system complexity.

Manual	With SID-Refresh™		
20 hours	4 hours		
Varied effort and error rate depending	More thorough and error-free		
on system complexity	regardless of system complexity		
Manual implementation of the checklist	80% automated		

F. SAP Supported Environments

The following table lists the SAP environments that are supported by **SID-Refresh**TM with other useful information.

Application	Version
SAP NetWeaver ABAP	7.00 - 7.50
SAP ECC	5.0 and 6.0
SAP S/4 HANA	From 1511
Solution Manager	From 7.0
SAP BI	From 7.0
SAP CRM	From 7.0
SAP EWM	From 7.0
SAP SCM	From 7.0
SAP GTS	From 7.0

G. SAP Supported Operating System

The following table lists the supported operating systems where the .jar file can be installed.

System	Architecture
Linux/Unix	64-bit (x86_64) / SPARC (64-bit), IBM AIX on POWER
	Systems (64-Bit)
Microsoft Windows	64-bit (x86_64)



H. Limitations of the Product

SID-RefreshTM satisfies the majority of the required functionalities when performing system refresh. The following lists down the current limitations of the product.

- Refreshing systems between Unicode and non-Unicode
- Testing for SAP BI, CRM, SCM scenarios (basis technical configurations would still work, but module-specific technical configurations may not be covered)
- Does not support NetWeaver Java

II. Getting Started

The following sections introduce you to the first few actions as a new user of **SID-Refresh**TM.

A. General Prerequisites

- Should be run as <SID> adm account
- Requires Java Runtime Environment (JRE) only version 1.8 or higher
- Requires **SID-Refresh**TM License file SIDREFRESH.LIC in the directory with the SIDRefresh.jar file for Linux/Unix or the SIDRefresh.jar file for Windows systems
- **SID-Refresh™** can be run using GUI or the terminal console.
- It is strictly recommended to use R3trans version with time stamp 24.03.17 or newer.

B. Initial Setup

- 1. Download **SID-RefreshTM** from this <u>link</u> if you haven't already done so.
- 2. Login to the source system using a <SID> adm account.
- 3. Copy/Paste the **SIDRefresh.jar** (For Linux/Unix) or **SIDRefresh.exe** file (for Windows system) and the **SIDREFRESH.LIC** license file in the same directory.



- 4. Verify if the Java version installed in the system met the minimum requirement as stated in the General Prerequisites.
 - a. For Linux/Unix, run the following command in a terminal window:

java -version

b. For Windows, run the following command in command prompt:

java -version

- 5. Verify if the x terminal is working and if necessary, adjust the DISPLAY environment variable because it is required to run the X11 server.
- 6. Verify if the R3Trans path is within <sid>adm PATH environment and if you can execute a test connect.
 - a. For Linux/Unix, run the following command in a terminal:

R3trans -x

b. For Windows, run the following command in command prompt:

R3trans.exe -x

C. Installing and Updating Licenses

- You will receive an e-mail with the license key file attached.
- If you need to renew or replace the key, please open a <u>support</u> ticket, <u>submit</u> a <u>request</u> or contact by e-mail at <u>support@itconductor.com</u>.
- Copy the license key file SIDREFRESH.LIC to the **SID-Refresh™** home directory where the SIDRefresh.jar is located.



Using GUI

III. Administering System Refresh Using SID-Refresh™

A. Exporting the Target System's Technical Data and Configuration

- 1. Launch **SID-Refresh**TM in GUI mode.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar

b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar

Important: If <sid>adm is not used to run the program, you will encounter an error. To troubleshoot this, please refer to the SID-Refresh Help Wiki.

2. **SID-Refresh**TM will check the environment variables and automatically search for R3trans in the default directory.

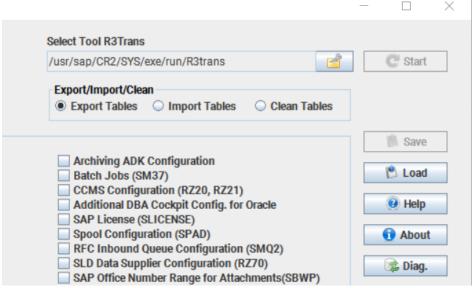


Figure 5: R3trans Path on Linux/Unix Systems





Figure 6: R3trans Path on Windows Systems

If R3trans is not in the default directory, you must specify the path where it is saved.

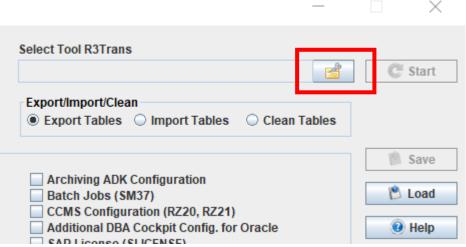


Figure 7: Manual Selection of R3trans Path

Upon clicking the **open folder** button in the **Select Tool R3Trans** section, a dialog box will open where you can select the path where R3trans is saved. Click **Open**.



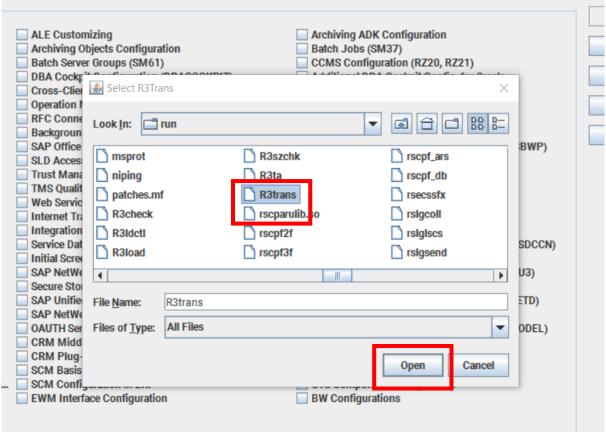


Figure 8: Navigate to R3trans Path on Linux/Unix Systems

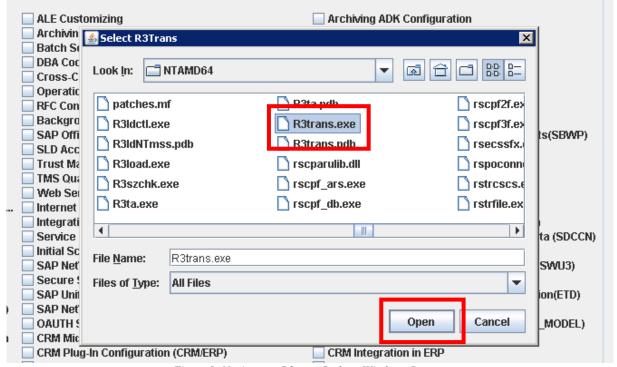


Figure 9: Navigate to R3trans Path on Windows Systems



3. **SID-Refresh**TM will also define a default directory for the Export/Import/Clean.

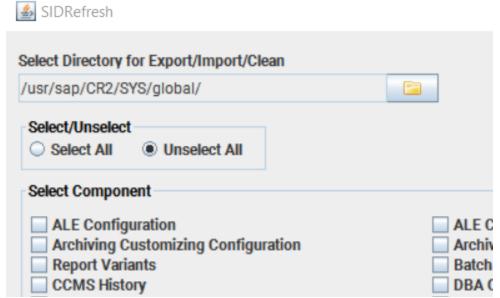


Figure 10: Default Export/Import Path on Linux/Unix Systems



Figure 11: Default Export/Import Path on Windows Systems

Recommendation: Use a different export directory other than the default which now brings us to Step 4.



- 4. Create an **ExportImport** folder within the global directory.
- 5. Click the **open folder** button in **Select Directory for Export/Import** section and select the path where you created that folder.

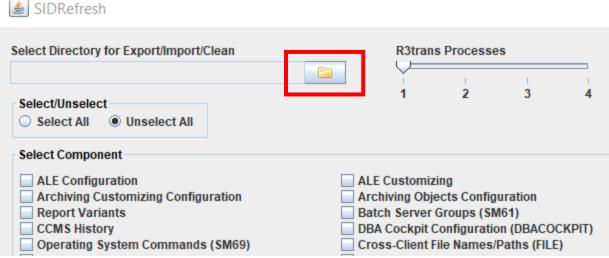


Figure 12: Manual Path Selection for Export/Import

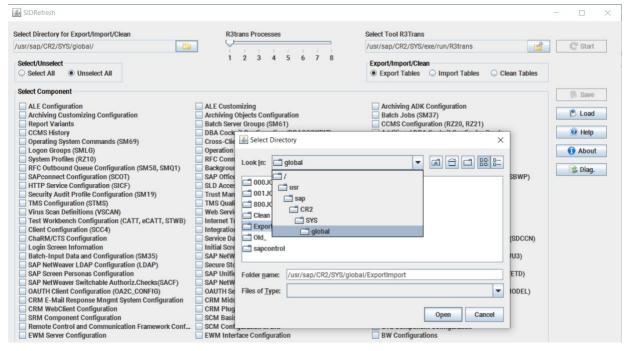


Figure 13: Changing Path to Global Directory on Linux/Unix Systems



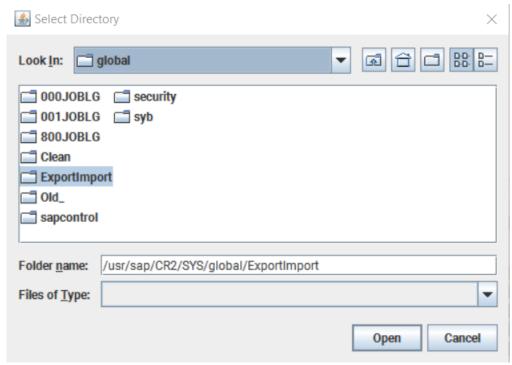


Figure 14: Selecting ExportImport Directory on Linux/Unix Systems

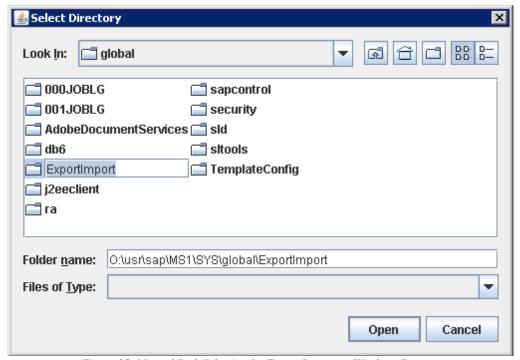


Figure 15: Manual Path Selection for Export/Import on Windows Systems



6. Select the number of R3trans processes to use for the export procedure.



Figure 16: Number of R3trans Processes for Export

SID-RefreshTM checks the number of processors (CPU) in the system. By default, the slider is positioned at 1. The slider in the tool allows you to select the number of concurrent R3trans tasks that you want to run. A maximum of 8 is allowed since higher than 8 does not yield to shorter runtime.

Checkpoint: If any of the following are incorrect, the Save and Start buttons, as well as the component selections, will be grayed out or disabled. So, ensure these two are properly defined.

- Export/Import path
- R3trans path
- 7. In the **Export/Import/Clean** section, select the **Export Tables** radio button.



Figure 17: Selecting Export Tables Radio Button



8. Select the components that you want to export and save.

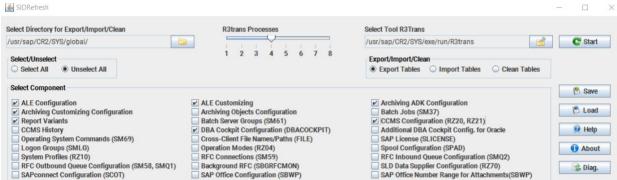


Figure 18: Component Selection for Export Process

In the **Select/Unselect** section, You can either select the **Select All** radio button or individually check the checkboxes of the configuration files you want to export.

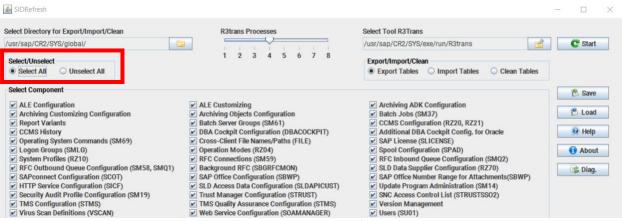


Figure 19: Select All Option in Component Selection for Export Process

9. Users have the option to save the configuration selection for later use or next execution of the export procedure. To do this, click the **Save** button, specify the file name and save it in the same **ExportImport** path you have defined in Step 2. (Optional)

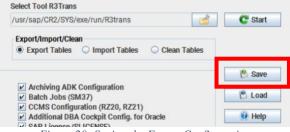


Figure 20: Saving the Export Configuration



Alternatively, you can select the **Load** button to use an existing configuration/selection you have saved in your previous run.

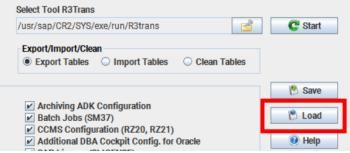


Figure 21: Loading Previously Saved Configuration

A dialog box will open. Navigate to the directory where you saved the export configuration file you have previously saved, select that file, and click **Open**.

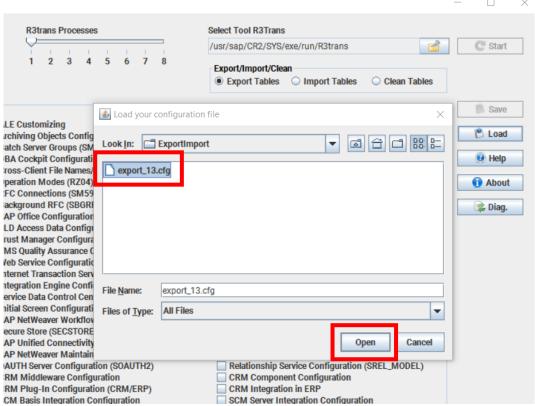


Figure 22: Navigating and Selecting the Configuration File

10. Click the **Start** button to start the export process for all the configurations you have selected in Step 7.





Figure 23: Starting the Export Process

Depending on the complexity of your systems, the degree of parallelism (i.e. the number of concurrent R3trans processes) you have indicated in Step 6, and the number of components you have selected in Step 8, the entire export process may take from a few minutes up to several hours. The status of the process execution can be seen in the progress bar at the bottom of the screen.



Figure 24: Export Progress Bar

Once the export process is completed, you will be notified by the "Export Complete" message box. Click **OK**.

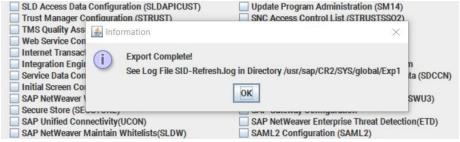


Figure 25: Export Completion Message

In addition, the **Export/Import/Clean Return Code** panel will display logs containing the components with the export process run time. You can check for any errors and perform troubleshooting if necessary. You may refer to the <u>SID-Refresh Help Wiki</u>



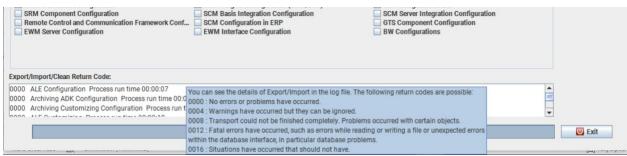


Figure 26: Export Return Codes

Note: All other operations (Start, Save, Load, Diagnose, Open Folder, etc.) will be disabled. These buttons will be grayed out and will remain inactive until the export process has been completed.

Using Console

- 1. To run in console mode, you must specify the command line options.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar -h

```
ozsapcrm2:cr2adm 57> java -jar ./SIDRefresh.jar -h
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
This is SID-Refresh version 1.4.8.20210105
Copyright (c) 2016-2021 IT-Conductor Inc. All rights reserved.
SID-Refresh can be invoked from the command line using the following command:
java -jar path-to-SID-Refresh/SID-Refresh.jar COMMAND [OPTIONS] [PARAMETERS]..
The following COMMANDS are possible:
                    :Display this help and exit successfully.
:Import Data
 -e
                    :Export Data
                    :Clean Data
                    :Check the path and version of R3trans
:Run in batch mode for ITC
The following OPTIONS are possible:
-d=\<Path> :Path for Export/Import/Claen Data
-exe=\<Path> :Path to R3Trans.exe
                    :Path to Export/Import/Clean config File
                    :Select the maximum number of parallel Export/Import/Clean processes
The following PARAMETERS are possible:
/ALECUST
/ARCHIVE_ADK
/ARCHIVE_CUST
/ARCHIVE_OBJ
```

Figure 27: Export Command Line Options on Linux/Unix Systems



b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar -h

```
Microsoft Windows (Version 6.1.7601)

C:\Users\nsiadm\cd c:\Install
c:\Install\java = jar SIDRefresh, jar -h
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Install\java = jar SIDRefresh, jar -h
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Install\java = jar SIDRefresh version 1.4.8.20210105220641 Licensed SIDs: *
Copyright (c) 2016-2021 IT-Conductor Inc. All rights reserved.

Usage
SID-Refresh version 1.4.8.20210105220641
Copyright (c) 2016-2021 IT-Conductor Inc. All rights reserved.

Usage
SID-Refresh can be invoked from the command line using the following command:
java = jar path=to=SID-Refresh\SID-Refresh,jar COMMAND [OPTIONS] [PARAMETERS]..

The following COMMANDS are possible:
-h : Display this help and exit successfully.
-i : Import Data
-e : Export Data
-e : Export Data
-c : Clean Data
-c : Path for Export/Inport/Clean Data
-ex=\CARACH\) : Path for Export/Inport/Clean Data
-ex=\CARACH\) : Path to Export/Inport/Clean Data
-ex=\CARACH\) : Path to Export/Inport/Clean config File
-t<\(-1.8\) : Select the maximum number of parallel Export/Inport/Clean processes

The following PARAMETERS are possible:
-ARCHUEL ONE
-ARCHUEL ONE
-ARCHUEL ONE
-ARCHUEL ONE
-ARCHUEL ONE
```

Figure 28: Export Command Line Options on Windows Systems

Recommendation: Run the program with the key **-chk** during the first run to check the environment variables and the console command line options will be displayed which can then be substituted into the launch command.

```
ozsapcrm2:cr2adm 58> java -jar ./SIDRefresh.jar -chk
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Runtime Java Version: 1.8
Program Run As: cr2adm
OS System: Linux
Number of CPU Cores: 8
Find Path to R3trans: /usr/sap/CR2/SYS/exe/run/R3trans
R3Trans Version is:6.24
R3Trans: Unicode version
Find Path for Export/Import: /usr/sap/CR2/SYS/qlobal/
```

Figure 29: -chk Option to Check Path and Version of R3trans on Linux/Unix Systems

```
c:\Install>java -jar SIDRefresh.jar -chk
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Runtine Java Version: 1.8
Program Run As: nsladm
OS System: Vindous Server 2008 R2
Nunber of CPU Cores: 8
Find Path to R3trans: 0:\usr\sap\MS1\SYS\exe\uc\NTAMD64\R3trans.exe
R3Trans Version is6.24
R3Trans: Unicode version: 0:\usr\sap\MS1\SYS\global\
```

Figure 30: -chk Option to Check Path and Version of R3trans on Windows Systems

- 2. Specify the following in the command to be executed upon export
 - Directory for the export
 - Path to the R3trans program
 - Number of maximum R3trans (if not specified, the default is 1)
 - Specific components or all of the components for export



a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar -e -t=4 d=/usr/sap/<SID>/SYS/global/ExportImport exe=/usr/sap/<SID>/SYS/exe/run/R3trans /ALECONFIG /ALECUST /ARCHIVE_ADK

```
ozsapcrm2:cr2adm 56> java -jar /Install/SIDRefresh.jar -e -t=4 -d=/usr/sap/CR2/SYS/global/ExportImport -exe=/usr/sap/CR2/SYS/exe/run/R3trans /ALECONFIG /ALECUST /ARCHIVE_ADK
SID-Refresh version 1.4.8.20210195220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210195220641 License SiDs: *
R3trans: /usr/sap/CR2/SYS/exe/run/R3trans
Directoty Export/Import: /usr/sap/CR2/SYS/global/ExportImport
Number of processing threads: 4
Process is starting, Please wait while Data are Exporting or Importing....
Working time can be up to 1-2 hours
[casessrans============] 100%
Export Process run time 00:00:01
Export Processor Completed!
Export Processor Completed!
```

Figure 31: Completion of Console Execution on Linux/Unix Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.

```
java -jar /Install/SIDRefresh.jar -e -t=4 -
d=/usr/sap/<SID>/SYS/global/ExportImport -
exe=/usr/sap/<SID>/SYS/exe/run/R3trans /ALL
```

b. For Windows, run the following command in command prompt

```
java -jar C:\Install\SIDRefresh.jar -e -t=4 -
d=D:\usr\sap\<SID>\SYS\global\ExportImport -
exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe
/ALECONFIG /ALECUST /ARCHIVE_ADK
```

Figure 32: Example Console Execution on Windows Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.

```
\label{lem:continuous} java -jar C:\Install\SIDRefresh.jar -e -t=4 -d=D:\usr\sap\<SID>\SYS\global\ExportImport -exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe /ALL
```



- **3. SID-Refresh**[™] also provides you an option to run the export process based on a previously saved configuration.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar f=/usr/sap/<SID>/SYS/global/ExportImport/<file name>.cfg

Figure 33: Exporting with Previously Saved Config on Linux/Unix Systems

b. For Windows, run the following command in command prompt:

java -jar C:\Install\SIDRefresh.jar f=D:\usr\sap\<SID>\SYS\global\ExportImport\export_13.cfg

```
C:\Install>java -jar C:\Install\SIDRefresh.jar -f=0:\usr\sap\MS1\SYS\global\ExportImport\export_13.cfg

SID-Refresh version 1.4.8.28210105228641 License Expiration: 2821-18-01

SID-Refresh version 1.4.8.28210105228641 License Expiration: 2821-18-01

SID-Refresh version 1.4.8.28210105228641 Licensed SIDs: *

SID-Refresh version 1.4.8.2821010528641 Lic
```

Figure 34: Exporting with Previously Saved Config on Windows

Validation of Successful Export

- 1. Navigate to the **ExportImport** directory.
- 2. Validate the content within the **ExportImport** folder and check if there is a **.log** file created.
- 3. View the content of the **.log** file. It should contain the tables exported as part of the configuration.
- 4. Alternatively, you can navigate to the subdirectories containing the actual configuration itself. You should see the exported .log file and the .dat file.
- 5. You can view the **.log** file for more details and to see the actions that were generated from each of those configurations. This will create a command file



and also the data that will be used in the importing procedure after the database refresh.

B. Cleaning the Target System's Technical Data and Configuration <u>Using GUI</u>

- 1. Launch **SID-Refresh**TM in GUI mode.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar/Install/SIDRefresh.jar

b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar

Important: If <sid>adm is not used to run the program, you will encounter an error. To troubleshoot this, please refer to the SID-Refresh Help Wiki.

2. **SID-Refresh**TM will check the environment variables and automatically search for R3trans in the default directory.

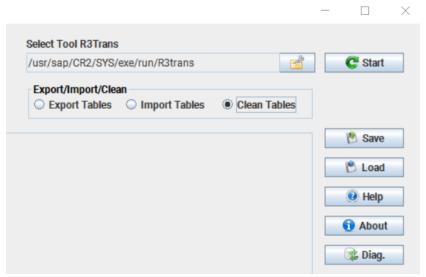


Figure 35: R3trans Path on Linux/Unix Systems



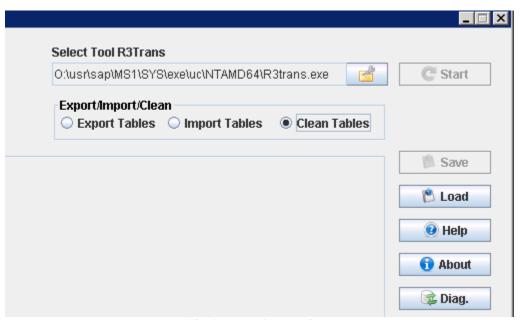


Figure 36: R3trans Path on Windows Systems

If R3trans is not in the default directory, you must specify the path where it is saved.



Figure 37: Manual Selection of R3trans Path

Upon clicking the **open folder** button in the **Select Tool R3Trans** section, a dialog box will open where you can select the path where R3trans is saved.

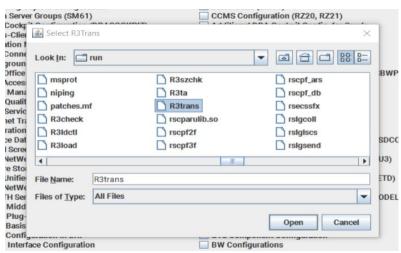


Figure 38: Navigating to R3trans Path on Linux/Unix Systems



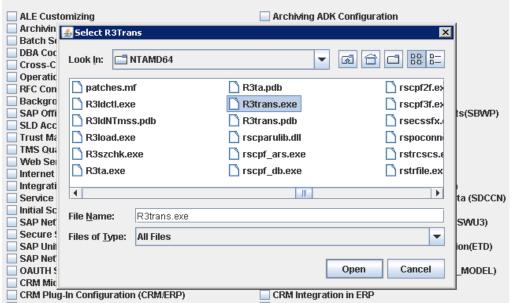


Figure 39: Navigating to R3trans Path on Windows Systems

3. **SID-Refresh**TM will also define a default directory for the Export/Import/Clean.

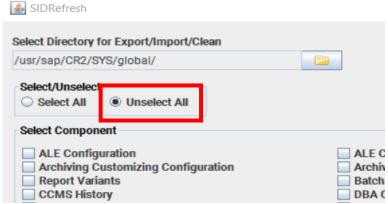


Figure 40: Default Clean Path on Linux/Unix Systems





Figure 41: Default Clean Path on Windows Systems

Recommendation: Use a different directory for the Clean Up process for backup purposes.

4. Click the **open folder** button in **Select Directory for Export/Import** section. Create a new folder for the **Clean Up** process.

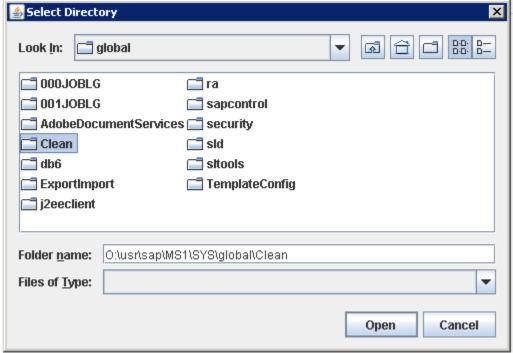


Figure 42: Creating a New Clean Folder on Windows Systems

5. Select the number of R3trans processes to use for the export procedure.





Figure 43: Number of R3trans Processes for Clean Up

SID-RefreshTM checks the number of processors (CPU) in the system. By default, the slider is positioned at 1. The slider in the tool allows you to select the number of concurrent R3trans tasks that you want to run. A maximum of 8 is allowed since higher than 8 does not yield to shorter runtime.

Checkpoint: If any of the following are incorrect, the Save and Start buttons, as well as the component selections, will be grayed out or disabled. So, ensure these two are properly defined.

- Export/Import path
- R3trans path
- 6. Select the components that you want to clean up and save.



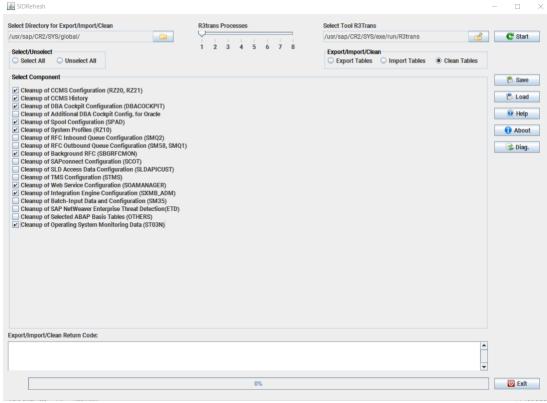


Figure 44: Component Selection for Clean Up Process

In the **Select/Unselect** section, You can either select the **Select All** radio button or individually check the checkboxes of the configuration files you want to export.

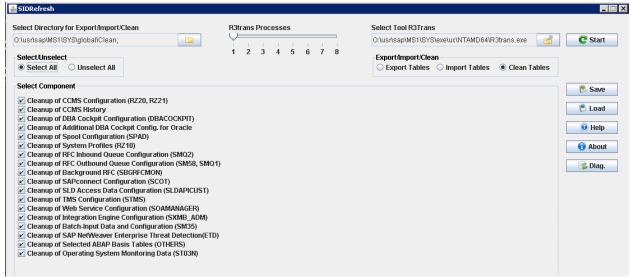


Figure 45: Select or Unselect All for Clean Up Process



7. Users have the option to save the configuration selection for later use or next execution of the export procedure. To do this, click the **Save** button, specify the file name and save it in the same **newly created** path for the Clean Up process you have defined in Step 4. (Optional)

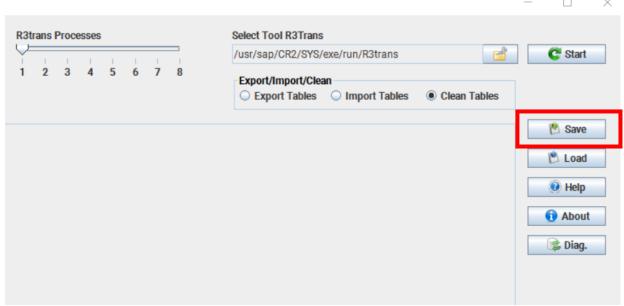


Figure 46: Saving the Clean Up Configuration

A dialog box will open. Navigate to the directory where you saved the **Clean Up** configuration file you have previously saved, select that file, and click **Open**.



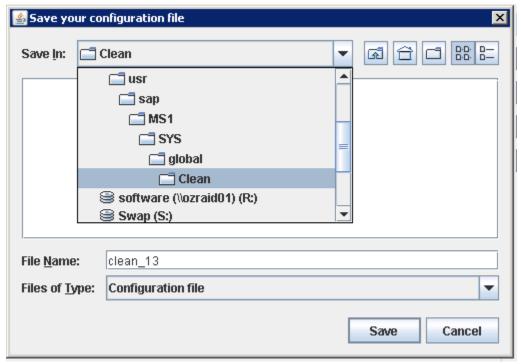


Figure 47: Navigating and Selecting the Clean Up Configuration File

8. Click the **Start** button to start the **Clean Up** process for all the configurations you have selected in Step 7.

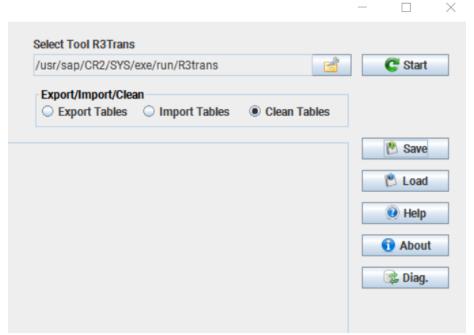


Figure 48: Starting the Export Process



A dialog will open for the request to perform a backup for the tables to be cleaned up.

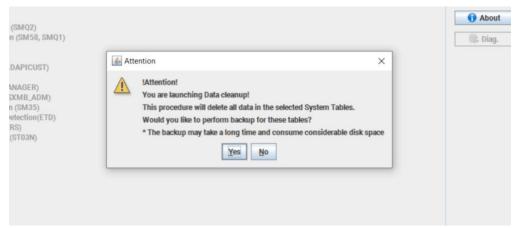


Figure 49: Warning Dialog Box When Launching Data Cleanup

Depending on the complexity of your systems, the degree of parallelism (i.e. the number of concurrent R3trans processes) you have indicated in Step 5, and the number of components you have selected in Step 6, the entire export process may take from a few minutes up to several hours. The status of the process execution can be seen in the progress bar at the bottom of the screen.

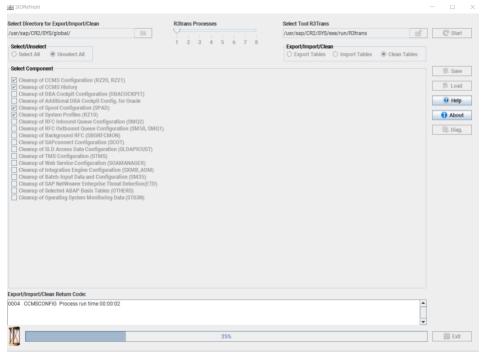


Figure 50: Clean Up Progress Bar



In addition, the **Export/Import/Clean Return Code** panel will display logs containing the components with the process run time. You can check for any errors and perform troubleshooting if necessary. You may refer to the <u>Troubleshooting Guide</u>.

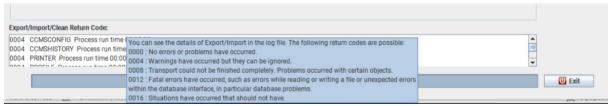


Figure 51: Clean Return Codes

Note: All other operations (Start, Save, Load, Diagnose, Open Folder, etc.) will be disabled. These buttons will be grayed out and will remain inactive until the **Clean Up** process has been completed.

Using Console

- 1. To run in console mode, you must specify the command line options.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar -h

```
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01 SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
This is SID-Refresh version 1.4.8.2021010522
Copyright (c) 2016-2021 IT-Conductor Inc. All rights reserved.
SID-Refresh can be invoked from the command line using the following command:
java -jar path-to-SID-Refresh/SID-Refresh.jar COMMAND [OPTIONS] [PARAMETERS]..
The following COMMANDS are possible:
                  :Display this help and exit successfully.
:Import Data
:Export Data
 -h
-i
 -e
                  :Clean Data
                   :Check the path and version of R3trans
                  :Run in batch mode for ITC
 -b
The following OPTIONS are possible:
                  :Path for Export/Import/Claen Data
:Path to R3Trans.exe
 -exe=\<Path>
                  :Path to Export/Import/Clean config File
:Select the maximum number of parallel Export/Import/Clean processes
 -f=\<Path>
 -t=<1..8>
The following PARAMETERS are possible:
/ALECONFIG
 /ALECUST
/ARCHIVE_ADK
/ARCHIVE_CUST
 ARCHIVE_OBJ
```

Figure 52: Clean Command Line Options on Linux/Unix Systems



_b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar -h

Figure 53: Clean Command Line Options on Windows Systems

Recommendation: Run the program with the key **-chk** during the first run to check the environment variables and the console command line options will be displayed which can then be substituted into the launch command.

```
ozsapcrm2:cr2adm 58> java -jar ./SIDRefresh.jar -chk
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Runtime Java Version: 1.8
Program Run As: cr2adm
OS System: Linux
Number of CPU Cores: 8
Find Path to R3trans: /usr/sap/CR2/SYS/exe/run/R3trans
R3Trans Version is:6.24
R3Trans: Unicode version
Find Path for Export/Import: /usr/sap/CR2/SYS/global/
```

Figure 54: -chk Option to Check Path and Version of R3trans on Linux/Unix Systems

```
c:\Install\java -jar SIDRefresh.jar -chk
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Runtine dava Version: 1.8
Program Run As: msladm
OS System: Vindous Server 2008 R2
Number of CPU Cores: 8
Find Path to Bitrans: 0:\usr\sap\MS1\SYS\exe\uc\NTAMD64\R3trans.exe
R3Irans Version is:6.24
R3Irans Unicode version
Find Path for Export/Import: 0:\usr\sap\MS1\SYS\global\
```

Figure 55: -chk Option to Check Path and Version of R3trans on Windows Systems



- 2. Specify the following in the command to be executed upon the clean-up procedure:
 - Directory for the Clean
 - Path to the R3trans Program
 - Number of maximum R3trans (if not specified, the default is 1)
 - Specific Components or All of the Components for Clean
 - a. For Linux/Unix, run the following command in a terminal:

```
java -jar /Install/SIDRefresh.jar -c -t=4 -
d=/usr/sap/<SID>/SYS/global/Clean -
exe=/usr/sap/<SID>/SYS/exe/run/R3trans /CCMSCONFIG
/CCMSHISTORY /DBACOCKPIT /DBAORACLE /PRINTER
```

```
orsapcrm2:cr2adm 63b java jar /5IDRefresh.jar -c t-d-4-de/usr/sap/CR2/SY3/global/Clean -exe=/usr/sap/CR2/SY3/exe/run/R3trans /CCMSCONFIG /CCMSHISTORY /DBACOCKPIT /DBACRACLE /PRINTER SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Attention!
You are launching Data cleanup!
This procedure valid elete all data in the selected System Tables.
* The backup may take a long time and consume considerable disk space 
# Side of the selected System Side of the selected System Tables.

* The backup may take a long time and consume considerable disk space 
# Side of the selected System Side of the selected System Tables.

* The backup may take a long time and consume considerable disk space 
# Side of the selected System Side of the selected System Tables.

* The backup may take a long time and consume considerable disk space 
# Side of the selected System Side of the selected System Tables.

* The backup may take a long time and consume considerable disk space 
# Side of the selected System Side of the selected System Tables.

* The backup say to the selected System Tables.

* The backup say to the selected System Tables Side of the selected System Side of the selected System Side of the selected System Tables.

* The backup say to the selected System Tables Side of the selected System Side of the
```

Figure 56: Completion of Console Execution on Linux/Unix Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.

```
java -jar /Install/SIDRefresh.jar -c -t=4 -
d=/usr/sap/<SID>/SYS/global/Clean -
exe=/usr/sap/<SID>/SYS/exe/run/R3trans /ALL
```

b. For Windows, run the following command in command prompt:

```
java -jar C:\Install\SIDRefresh.jar -c -t=4 -
d=D:\usr\sap\<SID>\SYS\global\Clean -
exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe
/CCMSCONFIG /CCMSHISTORY /DBACOCKPIT
/DBAORACLE /PRINTER
```



```
c:\Install>jowa -jan SIDRefresh.jan -c -stal -stal:\usr\sap\NEP\SYS\eachuc\NTA*ND64\R3trans.exe /CCMSCONFIG /CCMSHISTORY /DBACOCKPIT /DBACRACLE /PRINTER SID-Refresh version 1.4.8.20210105220641 License Spiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *

Altention!
You are launching Data cleanup!
This procedure will delter all data in the selected System Tables.
* The backup any take a long time and consume considerable disk space |
Would you like to perform backup for these tables?(yes/no):yes

R3trans: D:\usr\sap\NSP\SYS\exe\usr\usr\usr\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\uspace\usp
```

Figure 57: Example Console Execution on Windows Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.

```
java -jar C:\Install\SIDRefresh.jar -c -t=4 -
d=D:\usr\sap\<SID>\SYS\global\Clean -
exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe /ALL
```

A dialog will open for the request to perform a backup for the tables to be cleaned up:

```
!Attention!
You are launching Data cleanup!
This procedure will delete all data in the selected System Tables.
* The backup may take a long time and consume considerable disk space
Would you like to perform backup for these tables?(yes/no):yes
```

Figure 58: Warning Dialog Box when Launching Data Cleanup

- 3. **SID-Refresh**TM also provides you an option to run the clean process based on a previously saved configuration.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar f=/usr/sap/<SID>/SYS/global/Clean/<file name>.cfg

```
ossporm2:cr2adm 649; java -jar //SIDRefresh.jar -f=/usr/sap/CB2/SYS/global/Clean/clean_13.cfg
SID-Refresh version 1.4.8.20210155220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210155220641 Licensed SIDs: *
| The Fresh version 1.4.8.20210155220641 Licensed SIDs: *
| The sproadward will delete all data in the selected System Tables.
| This procedure will delete all data in the selected System Tables.
| This procedure will delete all data in the selected System Tables.
| This procedure will delete all data in the selected System Tables.
| This procedure will delete all data in the selected System Tables.
| This procedure will delete all data in the selected System Tables.
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| This procedure will delete all data in the selected System Tables.
| Rither this procedure will be the selected System Tables.
| Rither this procedure will be the selected System Tables.
| Rither this procedure will be the selected System Tables.
| Rither this processing this procedure will be the selected System Tables and System Tables.
| Rither this processing this procedure will be the selected System Tables.
| Rither this process of this process of the selected System Tables.
| Rither this process of this process of the selected System Tables.
| Rither this process of the selected System Tables.
| Rither this process of this p
```

Figure 59: Cleaning with Previously Saved Config on Linux/Unix Systems



b. For Windows, run the following command in command prompt:

java -jar C:\Install\SIDRefresh.jar f=D:\usr\sap\<SID>\SYS\global\Clean\<file name>.cfg

Figure 60: Cleaning with Previously Saved Config on Windows

Validation of Successful Clean

- 1. Navigate to the Clean directory.
- 2. Validate the content within the Clean folder and check if there is a .log file created.
- 3. View the content of the .log file. It should contain the tables cleaned as part of the configuration.
- 4. Alternatively, you can navigate to the subdirectories containing the actual configuration itself. You should see the exported .log file and the .dat file.
- 5. You can view the .log file for more details and to see the actions that were generated from each of those configurations.

Restoring a table(s) from Backup

If you want to restore a table(s) from backup, click **Yes** when the dialog box in Step 8 (Clean Up) asks you if you want to perform backup. Then select **Import Tables**, ensure you are in the **Clean Up** directory, select the components that you want to restore, and finally click **Start**.



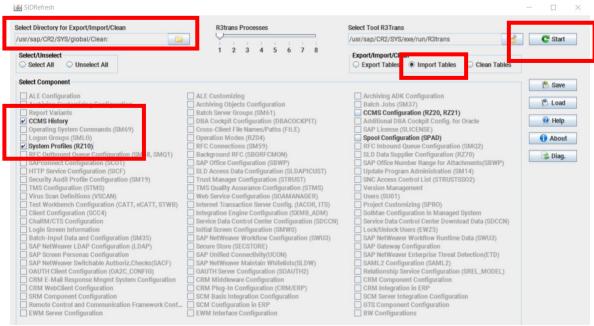


Figure 61: Restoring Tables After Clean Up Process

C. Importing the Source System's Technical Data and Configuration

Using GUI

- 1. Launch **SID-Refresh**TM in GUI mode.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar/Install/SIDRefresh.jar

b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar

Important: If <sid>adm is not used to run the program, you will encounter an error. To troubleshoot this, please refer to the SID-Refresh Help Wiki.

2. **SID-Refresh**TM will check the environment variables and automatically search for R3trans in the default directory.



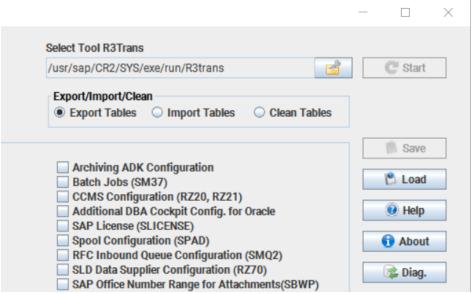


Figure 62: R3trans Path on Linux/Unix Systems

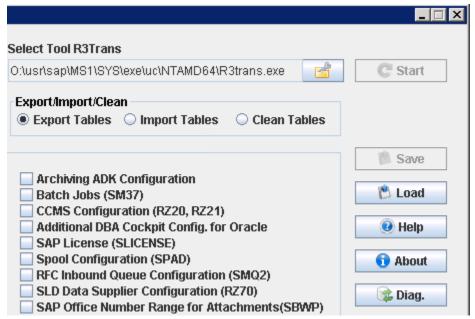


Figure 63: R3trans Path on Windows Systems

If R3trans is not in the default directory, you must specify the path where it is saved.



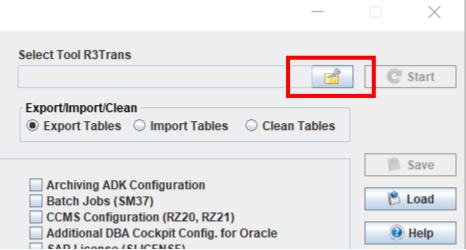


Figure 64: Manual Selection of R3trans Path

Upon clicking the **open folder** button in the **Select Tool R3Trans** section, a dialog box will open where you can select the path where R3trans is saved.

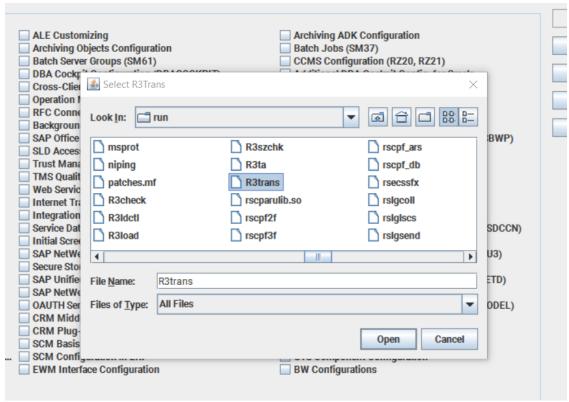


Figure 65: Navigating to R3trans Path on Linux/Unix Systems



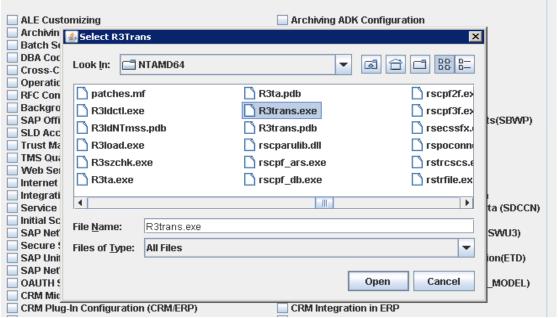


Figure 66: Navigating to R3trans Path on Windows Systems

3. Select the directory for the same folder you created previously in the Export procedure.

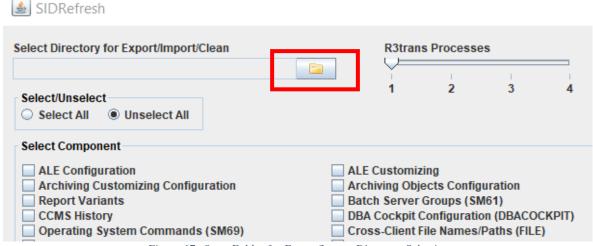


Figure 67: Open Folder for Export/Import Directory Selection



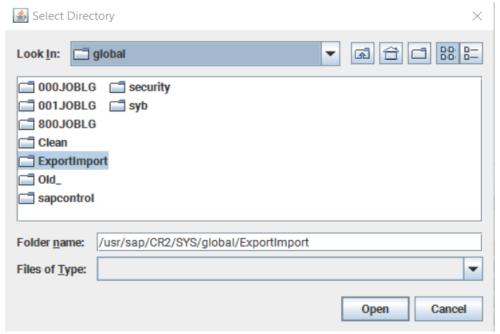


Figure 68: Selecting the Export/Import Path on Linux/Unix Systems

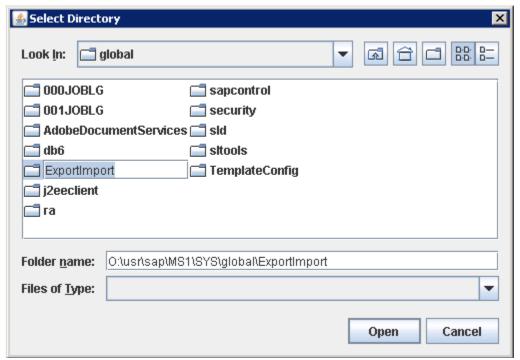


Figure 69: Selecting the Export/Import Path on Windows System

4. Select the number of R3trans processes to use for the **Import** procedure.



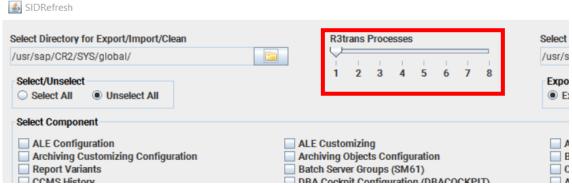


Figure 70: Number of R3trans Processes

SID-RefreshTM checks the number of processors (CPU) in the system. By default, the slider is positioned at 1. The slider allows you to select the number of concurrent tasks. A maximum of 8 is allowed since higher than 8 does not yield to shorter runtime.

5. In the **Export/Import/Clean** section, select the **Import Tables** radio button.

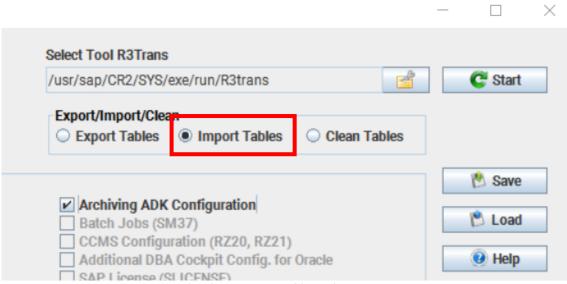


Figure 71: Selecting Import Tables Radio Button

SID-RefreshTM automatically reads the components that were successfully exported in the previous Export procedure. All the components that were not exported are grayed out.

6. Select the components that you want to import and save.



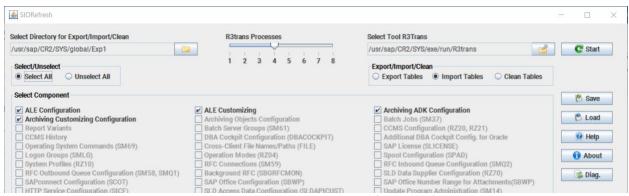


Figure 72: Selecting Components to be Imported

In the **Select/Unselect** section, you have the option to **Select All**. Ideally, you should import all the components that you have exported previously.



Figure 73: Select All Option

In cases where you don't want to import a specific configuration file back to the new target system, you can easily unselect the checkbox next to its name.

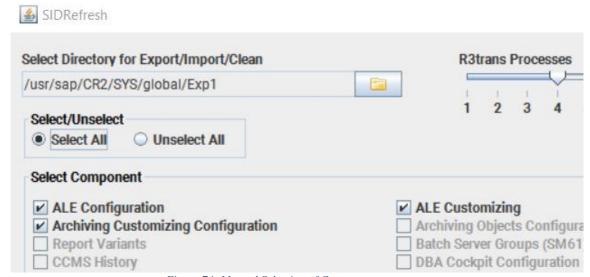
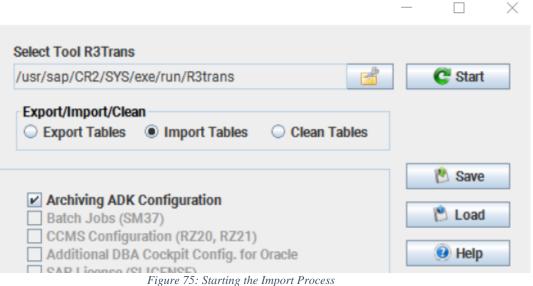


Figure 74: Manual Selection of Components

7. Save the configuration of the import by clicking the **Save** button. (Optional. This is useful in cases where you will be performing the exact import procedure in another target system. It saves you time and effort as you opt not to perform the Import procedure all over again.)



8. Click the **Start** button to start the import process.



Depending on the complexity of your systems, the degree of parallelism (i.e. the number of concurrent R3trans processes) you have indicated in Step 4, and the number of components you have selected in Step 6, the entire export process may take from a few minutes up to several hours. The status of the process execution can be seen in the progress bar at the bottom of the screen.

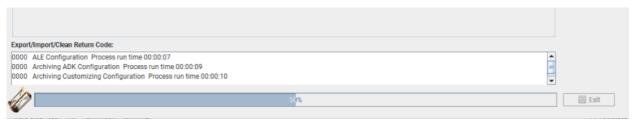


Figure 76: Import Progress Bar

In addition, the **Export/Import/Clean Return Code** panel will display logs containing the components with the process run time. You can check for any errors and perform troubleshooting if necessary. You may refer to the SID-Refresh Help Wiki



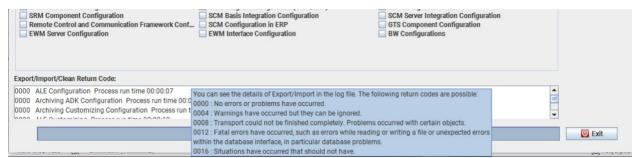


Figure 77: Import Return Codes

Note: All other operations (Start, Save, Load, Diagnose, Open Folder, etc.) will be disabled. These buttons will be grayed out and will remain inactive until the **Import** process has been completed.

Using Console

- 1. To run in console mode, you must specify the command line options.
 - a. For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar -h

```
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01 SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
This is SID-Refresh version 1.4.8.20210105220641
Copyright (c) 2016-2021 IT-Conductor Inc. All rights reserved.
SID-Refresh can be invoked from the command line using the following command:
java -jar path-to-SID-Refresh/SID-Refresh.jar COMMAND [OPTIONS] [PARAMETERS]..
The following COMMANDS are possible:
                    :Display this help and exit successfully.
:Import Data
:Export Data
 -e
                    :Clean Data
                    :Check the path and version of R3trans
                    :Run in batch mode for ITC
The following OPTIONS are possible:
-d=\<Path> :Path for Export/Import/Claen Data
                    :Path to R3Trans.exe
                    :Path to Export/Import/Clean config File 
:Select the maximum number of parallel Export/Import/Clean processes
-f=\<Path>
-t=<1..8>
The following PARAMETERS are possible:
/ALECUST
/ARCHIVE_ADK
/ARCHIVE_CUST
/ARCHIVE_OBJ
```

Figure 78: Import Command Line Options on Linux/Unix Systems



b. For Windows, run the following command in command prompt:

java -jar SIDRefresh.jar -h

Figure 79: Import Command Line Options on Windows Systems

Recommendation: Run the program with the key **-chk** during the first run to check the environment variables and the console command line options will be displayed which can then be substituted into the launch command.

```
ozsapcrm2:cr2adm 58> java -jar ./SIDRefresh.jar -chk
SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *
Runtime Java Version: 1.8
Program Run As: cr2adm
OS System: Linux
Number of CPU Cores: 8
Find Path to R3trans: /usr/sap/CR2/SYS/exe/run/R3trans
R3Trans Version is:6.24
R3Trans: Unicode version
Find Path for Export/Import: /usr/sap/CR2/SYS/global/
```

Figure 80: -chk Option to Check Path and Version of R3trans on Linux/Unix Systems

```
c:\Install\]ava -jar SIDRefresh.jar -chk
SID-Refresh version 1.48.28218195228641 License Expiration: 2021-10-01
SID-Refresh version 1.4.8.20210195220641 Licensed SIDs: *
SID-Refresh version 1.4.8.20210195220641 Licensed SIDs: *
Program Run for milder mil
```

Figure 81: -chk Option to Check Path and Version of R3trans on Windows Systems

- 2. Specify the following in the command to be executed upon export
 - Directory for the export
 - Path to the R3trans program



- Number of maximum R3trans (if not specified, the default is 1)
- Specific components or all of the components for export
- For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar -i -t=4 d=/usr/sap/<SID>/SYS/global/ExportImport exe=/usr/sap/<SID>/SYS/exe/run/R3trans /ALECONFIG /ALECUST /ARCHIVE_ADK

Figure 82: Completion of Console Execution on Linux/Unix Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.

```
java -jar /Install/SIDRefresh.jar -i -t=4 -
d=/usr/sap/<SID>/SYS/global/ExportImport -
exe=/usr/sap/<SID>/SYS/exe/run/R3trans /ALL
```

• For Windows, run the following command in command prompt

java -jar C:\Install\SIDRefresh.jar -i -t=4 d=D:\usr\sap\<SID>\SYS\global\ExportImport exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe /ALECONFIG /ALECUST /ARCHIVE_ADK

```
Administrator: Command Prompt

:\text{II}\text{jan} = \text{jar} :\text{C:\text{Install\Side} Befresh.jar} = \text{f-0:\text{var}\sightar} = \text{f0:\text{var}\sightar} = \text{f0:\text{var}\sightar} = \text{f0:\text{var}\sightar} = \text{f0:\text{var}\sightar} = \text{f0:\text{var}\sightar} = \text{side} =
```

Figure 83: Example Console Execution on Windows Systems

Alternatively, you can specify /ALL if you want to export all the components of the source system.



java -jar C:\Install\SIDRefresh.jar -i -t=4 d=D:\usr\sap\<SID>\SYS\global\ExportImport exe=D:\usr\sap\<SID>\SYS\exe\uc\NTAMD64\R3trans.exe /ALL

- **3. SID-Refresh**[™] also provides you an option to run the import process based on a previously saved configuration.
 - For Linux/Unix, run the following command in a terminal:

java -jar /Install/SIDRefresh.jar f=/usr/sap/<SID>/SYS/global/ExportImport/<file name>.cfg

Figure 84: Importing with Previously Saved Config on Linux/Unix Systems

• For Windows, run the following command in command prompt:

java -jar C:\Install\SIDRefresh.jar f=D:\usr\sap\<SID>\SYS\global\ExportImport\<file name>.cfg

```
c:\Install\java -jar C:\Install\SIDRefresh.jar -f-0:\usr\sap\MSi\SYS\global\ExportImport\inport_13.cfg

SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01

SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *

R3trans: 0:\usr\sap\MSi\SYS\sexe\usr\NIHIDS4\Ritrans.exe

Infort Properting Export/Import: 0:\usr\sap\MSi\SYS\global\ExportImport

R3trans: 0:\usr\sap\MSi\SYS\exe\usr\NIHIDS4\Ritrans.exe

Properting: 1 pterting: Please wait while Data are Exporting or Importing....

Working time can be up to 1-2 hours

Import Process run time 00:00:106

Import Process Completed!

See Log File SID-Refresh.log in Directory 0:\usr\sap\MSi\SYS\global\ExportImport

Note:

If you have imported users execute report RSUSR405 which refreshs all SAP user

related buffers and makes all authorization changes effective immediately.

Then reset the SAP table buffer after importing several components (buffer command /$TAB).

c:\Install>_
```

Figure 85: Importing with Previously Saved Config on Windows

Validation of Successful Import

- 1. Navigate to the **ExportImport** directory.
- 2. Validate the content of the import log. It should have the tables that were reimported back into the system after the database was refreshed. It should also indicate the process run time.



- 3. Alternatively, you can navigate to the path where ALECUST is defined. Validate the content within the **import_ALECUST.log** file.
- 4. Check if there are any errors.
- 5. Start SAP.

IV. Troubleshooting Guide

This section includes a list of common issues, their symptoms, what environments are affected, what are the possible causes, and how to resolve them. Kindly read through to find out how you can solve the errors you may have encountered while using **SID-Refresh**TM.

Program Run as: root

Symptom

• Error message upon launching **SID-Refresh**TM.

Environment:

Both Linux/Unix and Windows Systems

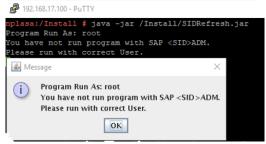


Figure 86: Error on Linux/Unix if not run by <SID> adm user

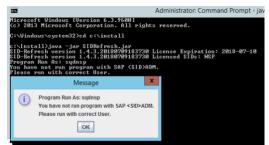


Figure 87: Error on Windows if not run by <SID> adm user



Cause

• If <sid>adm is not used to run the program, this error will be encountered.

Resolution

• Always run the program using a <sid>adm account. Please refer to the General Prerequisites for other system requirements needed to run the program.

Component CRM_MIDDLEWA_CRM - CRM Middleware Configuration

Symptom

- After System Landscape Copy is performed in a CRM landscape, the SITE ID values in CRMM_BUT_CRMOBJ and SMOHSITEID do not match.
- When business partner changes are loaded from CRM to ECC, the system sends a full update rather than just a modification, even though the BP exists on both systems.

Environment

- SAP Customer Relationship Management (CRM)
- SAP enhancement package for SAP CRM
- SAP enhancement package for SAP CRM, version for SAP HANA

Cause

SID-RefreshTM-1.4.0 includes table SMOHSITEID among the list of tables to be exported and imported. If the target systems of the system copy use different GUID values than the source system, there will be a mismatch between tables CRMM_BUT_CRMOBJ and SMOHSITEID. As a result, when subsequent loads Business Partner data changes are sent to the ECC, all the BP data will be sent instead of just the field that has been modified. This is because FM "BUPA_OUTBOUND_GET_MAIN checks the state of a BP by comparing the values in CRMM_BUT_CRMOBJ and SMOHSITEID. This will not lead to data inconsistency, but may cause an unnecessary overhead due to the extra volume of data being sent.

Resolution



Do not select table SMOHSITEID for export and import during system copy unless it is intended that the target systems use the same site ID values as the source systems.

<u>Component WEBSERVICE- Web Service Configuration</u> (SOAMANAGER), SICF- HTTP Service Configuration (SICF), RFC- RFC Connections (SM59)

Symptom

After a system refresh the SICF nodes have assigned wrong user/password data.

Environment

• All SAP System based on SAP NetWeaver platform

Cause

• The data that is required to calculate the system fields is removed from the buffering in the shared memory. However, in certain constellations, data relating to the system fields is still stored in the shared memory. This may cause the the system fields to be calculated incorrectly in subsequent requests.

Resolution

Call function module ICFBUFFER_INIT.

SID-Refresh™ fails to start with the Java-based GUI

Symptom

You are starting SID-Refresh[™] on Linux with the Java-based GUI, and this error appears:

Exception in thread "main" java.lang.UnsatisfiedLinkError:

/usr/java8_64/jre/lib/ppc64/libawt_xawt.so (Could not load module

/usr/java8_64/jre/lib/ppc64/libawt_xawt.so.

Dependent module /usr/lib/libXrender.a(shr_64.o) could not be loaded.

Member shr_64.o is not found in archive

Could not load module /usr/java8_64/jre/lib/ppc64/libawt_xawt.so.

Dependent module /usr/java8_64/jre/lib/ppc64/libawt_xawt.so could not be loaded.)



Environment

• Linux/Unix Systems

Cause

The error is caused by the missing library libXtst.so.6
The library should be /usr/lib64/libXtst.so.6 (which is a link to /usr/lib64/libXtst.so.6.1.0):
server1:~ # ls -al /usr/lib64 | grep libXtst.so
lrwxrwxrwx 1 root root 16 Apr 20 00:14 libXtst.so.6 -> libXtst.so.6.1.0
-rwxr-xr-x 1 root root 23016 Nov 10 2016 libXtst.so.6.1.0
server1:~ #

Resolution

If neither file is available, install the OS package that contains them:

- On RHEL (6 and 7): yum install libXtst
- On SLES11: zypper install xorg-x11-libs
- On SLES12: zypper install libXtst6

SID-Refresh™ runs with a Java-based GUI with Pixelated Fonts

Symptom

You are starting **SID-Refresh**TM on Linux/Unix with the Java-based GUI, and the text fonts are pixelated similar to the image below:



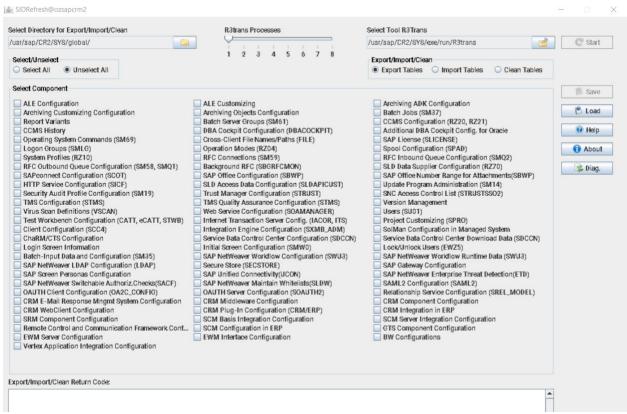


Figure 88: Sample Pixelated Text Fonts in SID-RefreshTM GUI (a)

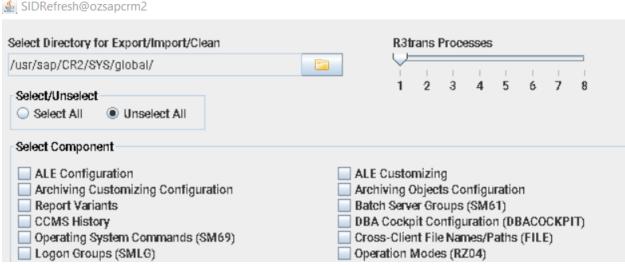


Figure 89: Sample Pixelated Text Fonts in SID-Refresh™ GUI (b)

Environment

• Linux/Unix Systems



Cause

- The desktop setting you want isn't supported on your desktop (e.g., you want LCD text on Windows)
- JRE doesn't recognize your desktop setting (e.g., KDE)
- You are automating testing under each of these conditions.

Resolution

Set on the command line as of the specified value to control rendering hints used by Swing text.

java -Dawt.useSystemAAFontSettings=lcd -jar /Install/SIDRefresh.jar

ozsapcrm2:cr2adm 60> java -Dawt.useSystemAAFontSettings=lcd -jar /Install/SIDRefresh.jar SID-Refresh version 1.4.8.20210105220641 License Expiration: 2021-10-01 SID-Refresh version 1.4.8.20210105220641 Licensed SIDs: *

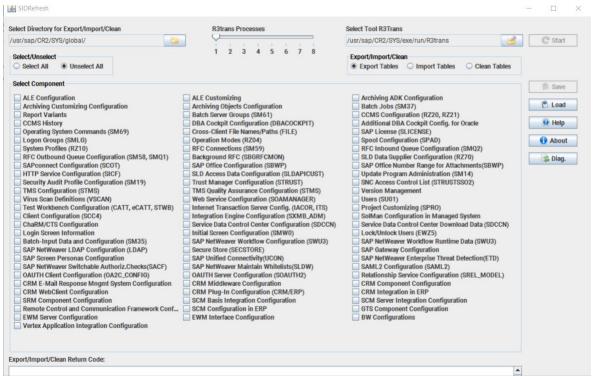


Figure 90: Improved Text Font in SID-RefreshTM GUI After Resolution



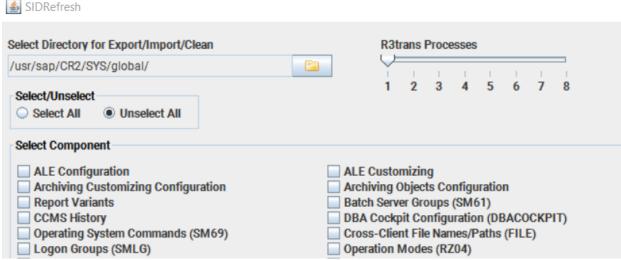


Figure 91: Improved Text Font in SID-RefreshTM GUI After Resolution (b)

No Email message is created after we create and send email in SO01. Transaction SCOT do not generate EMAIL messages.

Symptoms

- You find that in the system the incorrect Sender is being shown for Send requests (i.e., Mail, Fax, SMS, etc.) in transaction SOST.
- This issue can also be seen in related transactions to view send requests, i.e., SOSG, SOSB.
- The sender details shown may not even be from a user in the system.
- Also, in the SAP Business Workplace (transaction SBWP) for an affected user you will see that the incorrect User details (i.e., the details of the incorrect sender) are displayed here also.

Environment

• All SAP System based on SAP NetWeaver platform

Cause

The cause of the issue is Database inconsistencies related to the SAPoffice key of the User whose send requests you are attempting to view.

Resolution



1. Run the report RSADRCK1 in update mode as below i.e., unflag the option **Test run (without updates)**.

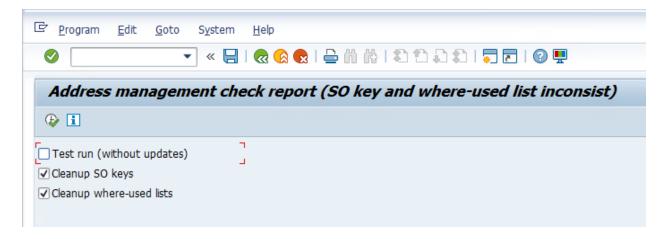


Figure 92: Address Management Check Report

2. To see the correct user details in SBWP you also need to reset the address buffer. To do so, go to transaction SO16. Then hit the **Reset buffer** button under the **Addressing** tab.

SU01: Error in user management

Symptom

- The dump appears when viewing or editing a user (SU01)
- Error Database error deleting from table adrp_uuid_index (adrc_uuid_index, adcp_uuid_index) occurs while deleting user/person

Environment

• All SAP System based on SAP NetWeaver platform

Cause

• There are active jobs or processes holding locks on the entries being deleted.

Resolution



1. After completing the import of the USER task, execute report (SE38): RSUSR405

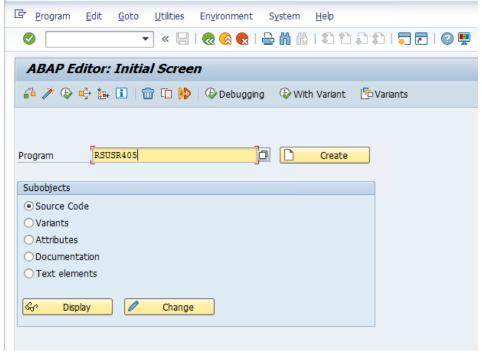


Figure 93: ABAP Editor

2. Reset TAB buffer /\$TAB:

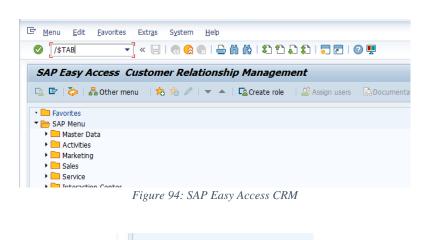


Figure 95: TAB buffer reset

▼ TAB buffer reset

3. Execute below reports via transaction SE38 in the following order:



• RSADRCK1 - the report checks SO key and where-used list consistency in Business Address Management:

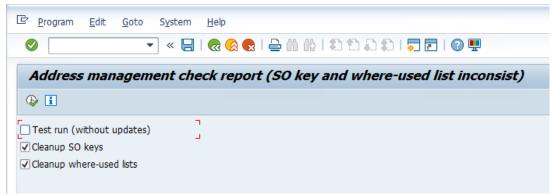


Figure 96: Business Address Management

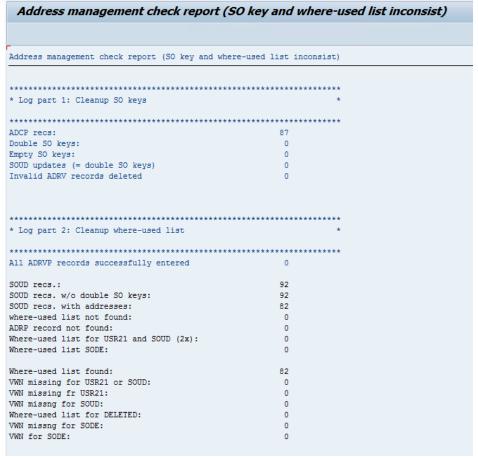


Figure 97: Address Management Check Report



• RSUSR_CLEANUP_USER_TABLES from SAP Note <u>1401395</u> - Report to clean up residual data in user tables:

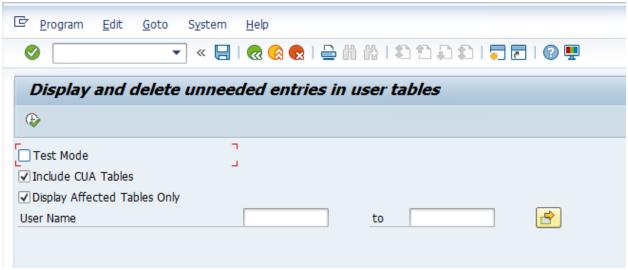


Figure 98: Display and Delete Entries in User Tables that are no longer needed

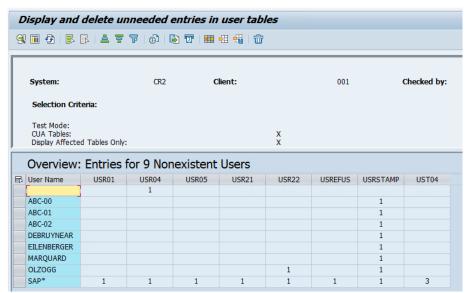


Figure 99: Overview Entries for n Non-existent Users

• RSSOUSCO - the report checks the consistency of user tables:



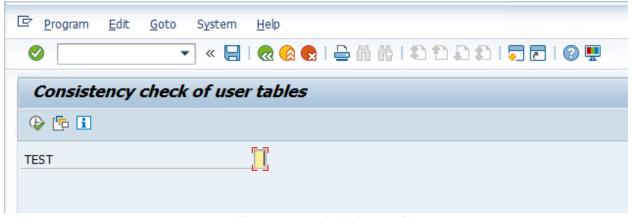


Figure 100: Consistency Check of User Tables (a)

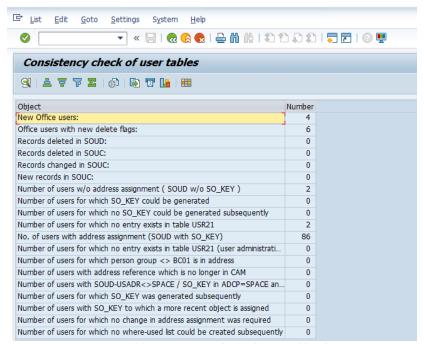


Figure 101: Consistency Check of User Tables (b)



• If a dump appears when viewing or editing a user (SU01):

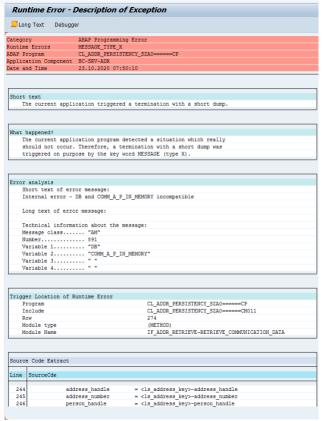


Figure 102: Runtime Error - Description of Exception

436119 - Correction report for communication data inconsistencies

 Copy the attached report Z_OSSNOTE_436119 into your system and execute it.

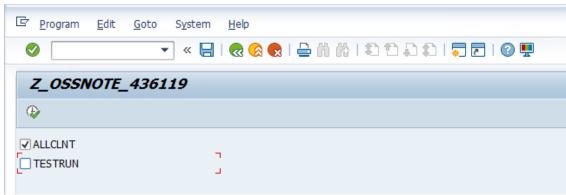


Figure 103: Z_OSSNOTE_436119 (a)



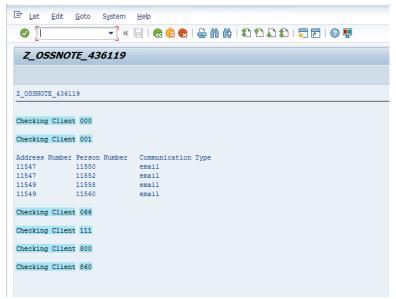


Figure 104: Z_OSSNOTE_436119 (b)

• If an error is returned when changing the company:



Figure 105: Error Message box for Database Error

<u>2299770 - Error ' Database error deleting from table adrp_uuid_index ' (adrc_uuid_index, adcp_uuid_index)</u> occurs while deleting user/person

2076508 - TDMS 4.0 - Handling of Address Index related tables

There are reports available that will resolve the inconsistencies between the address tables.

The reports are Z_UUID_ADRC, Z_UUID_ADRP and Z_UUID_ADCP, depending on which table the error message references, the relevant report should be run.



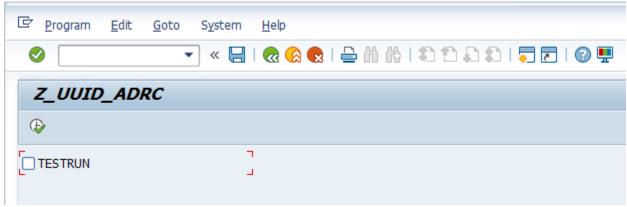


Figure 106: Z_ADCP_UUID (a)



Figure 107: Z_ADCP_UUID (b)

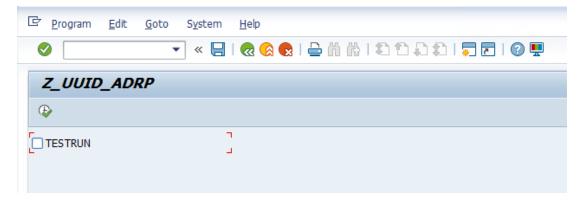


Figure 108: Z_UUID_ADRP (a)

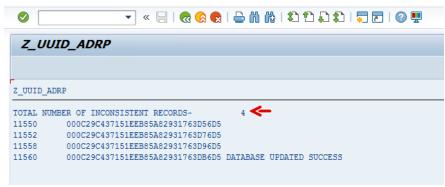


Figure 109: Z_UUID_ADRP (b)



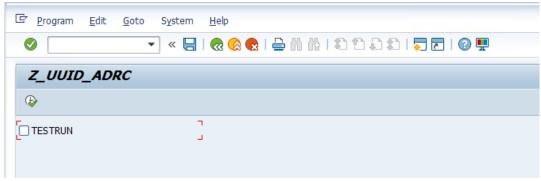


Figure 110: Z_UUID_ADRC (a)

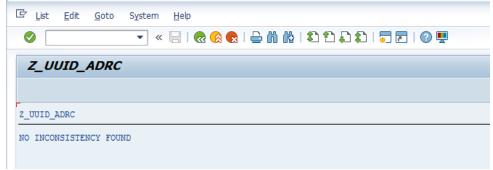


Figure 111: Z_UUID_ADRC (b)

V. Collecting Diagnosis for Support Team

To help **SID-RefreshTM** Support Team analyze and diagnose problems with your system, you can collect a range of diagnosis information from your system into a zip file.

- 1. Launch **SID-Refresh**TM in GUI mode.
- 2. Select the directory containing the export/import files.



Figure 112: Selecting Export/Import File Directory



3. To collect diagnosis, click Diag.



Figure 113: Starting the Diagnosis Process

4. After the diagnosis process is completed, you will see information about the created file.

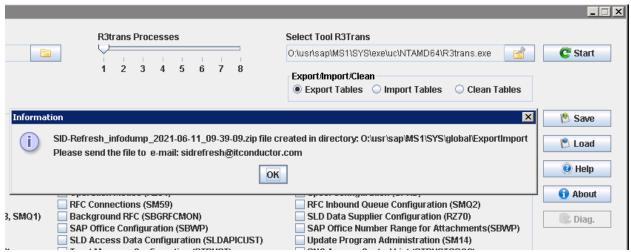


Figure 114: Dialog Box with Diagnosis File Information

5. You can download the collection of the diagnosis files (ZIP-archive having file name pattern (SID-Refresh_infodump_<yyyy>-<mm>-



<dd>_<hh>-<mm-<ss>.zip) and send to e-mail: sidrefresh@itconductor.com

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C. Changes to Terms and Conditions

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