



Easy Clone

Detailed Functional Specification

Version 2025.R2

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2. Functional Overview

2.1 Aim of this document

This document can be used as a pure functional overview of the SpinifexIT Easy Clone Tool. All functional details that are delivered through the Easy Clone should be discussed within this document. It is not a User Manual or Technical Functional Specification.

2.2 Who will use this document

This document will be used by anyone who requires a detailed overview of what Easy Clone is and what functionality is delivered as part of this toolkit.

2.3 Easy Clone Overview

Easy Clone is a SAP HR/PY product which can move HR/PY Employee Data from one SAP system to another. It will also allow for copying of Employee Central Data as an additional Licenced Add-on Solution to Easy Clone.

Customers use this tool to copy/create data from a production environment into a test environment without the need for a full client copy.

Easy Clone main features include the following:

- Ability to copy one or multiple employees
- Data can be scrambled to protect the Employees privacy
- Data can be directly copied between environments or stored in local files. **NOTE: The local files can only be used for SAP to SAP copies, but not currently for SuccessFactors Employee Central Copy (See later section on SuccessFactors Copy)*
- All common HR/PY data is duplicated
- Employee's history is copied
- Copy Employee Central Data linked to a SAP employee (With Employee Central Addon)
- Copying HR/Payroll configuration from one SAP system to another, and even to ECP or S/4HANA (via the add-on Easy Migration - Client Builder), which includes payroll configuration, time evaluation, payroll area, and schemas/rules
- Cloning of active and inactive employees simultaneously

The key aim for Easy Clone is to streamline most of the manual data creation and to reduce the need for System Refreshes (Client Copies) that users may already be doing.

Easy Clone is compatible with SAP ERP Central Component (ECC) versions ranging from EHP0 to EHP8, as well as SuccessFactors Employee Central Payroll (ECP) and SAP S/4 HANA.

2.3.1 Easy Clone and Concurrent Employment/Multiple Employment

It should be noted that Easy Clone will work with various types of employees including normal employees, as well as with systems that are configured to use concurrent employment and multiple employment.

When a system is set-up to be using multiple employment or concurrent employment, the system will automatically pick up any related employees to the main employee number (Person ID in the case of CE). Users then have the option of copying all employees in one go or can deselect some if they do not wish to copy them all (Note: This could result in payroll processing errors).

2.3.2 Easy Clone and Employee Central Data

SuccessFactors can be integrated with Easy Clone which would allow Employee Central data to be included when copying data from one SAP system to another. This needs activation before it can be available in Easy Clone. Read chapter 2.5 for the Administrative Functionality.

NOTE: Employee Central Employees can only be copied when they are directly linked to a SAP HCM Employee. It is only possible to select the SAP employees directly. When they are then linked to an Employee Central employee, then the additional Employee Central data will be copied.

Users have the option to copy Employees who are only in SuccessFactors, and have no link to the SAP HCM / ECP system. This functionality uses the Person ID in Employee Central when copying instead of SAP employee number. Copying employees that exist in SuccessFactors only (*and not in SAP*) follows a similar process that is currently used for copying normal EC/SAP employees.

2.3.3 Main Screen for running Easy Clone

Easy Clone is designed to work using a Tab Control type screen where users can move from one Tab to another to perform cloning of employees.

Each tab is described within the following sections.

2.3.4 Copy Type

The **Copy Type** tab is used by users to determine what type of copy they are performing. Users must select one Copy Type from the list shown below. The available options will control the direction of the copy and the source/destination of the data:

- **Copy Type**
 - Copy data from another system into the current system
 - Copy data from the current system to another system
 - Copy data from the current system to a file
 - Copy data from a file to the current system

2.3.4.1 Data in Copy Type

Users can also select the core data to be copied. ie. whether copying the employee data, copying just the Organizational Details, or just copying the Posting Results (*for a particular posting run ID*).

Configuration Tables can also be cloned. When users choose this as their data in copy type, **Tab 3. Employee Selection** would disappear because the table contents are not directly linked to an employee number.

The **Employee Central Only Copy** option is for copying Employee Central data without SAP HCM employee link. Choosing this option will disable the following Copy Types: ***Copy data from the current system to a file*** and ***Copy data from a file to the current system***.

The entries users select on this screen will affect how the screen looks on the **Copy Options**, **Employee Selection** and **Run** tabs.

2.3.4.2 Copying Between Non-Unicode and Unicode Systems

It is possible to copy Configurations and Employees from Non-Unicode System to Unicode System. Configurations can be copied while copying Master Data (*transparent type tables*), Infotypes, Payroll Results and Time Evaluation data from a Non-Unicode system to a Unicode system.

2.3.5 Copy Options

The copy options are described in the section below :

The copy options tab will have different menus depending on the **Copy Type** that users are performing.

2.3.5.1 Employee Master Data Copy Options

When copying employee master data such as employee data, infotypes org.data, payroll results organization data, time evaluation, etc., the Copy Options tab allows users to configure the way an employee gets copied to the target system.

Source System / Target System	This is a list of the RFC Destinations where the data will be copied from (<i>source</i>) or copied to (<i>target</i>). There are two options for what is displayed here. First, users can configure (<i>through a configuration table that is edited via SM30</i>) the valid RFC descriptions. This allows them to select the particular RFC destination to be used for Easy Clone. If no RFC destinations have been pre-setup, then the full list of RFC destinations will be shown. It is also possible to leave this field blank, which indicates that users are doing a copy within the current system.
Copy Options	The list of Copy Options available are self-explanatory. The options will control how the report executes and what it does with the data: <ul style="list-style-type: none"> ○ Copy to the same employee number

	<ul style="list-style-type: none"> ○ Create new employee number - Options here can either to automatically generate new employee number(s), or to start at a certain employee number. ○ Duplicate copied employees multiple times - Users can indicate here the number of duplications, and to set whether to automatically generate new employee number(s), or to start at a specific employee number.
Overwrite Options	<p>The last option is to allow the user to decide on what to do if the employee being copied is already existing. If not selected, it will fail (<i>if the employee number already exists</i>). Otherwise, here are the options available:</p> <ul style="list-style-type: none"> - Clear All Employee Details – This will clear all known tables that Easy Clone can copy - Clear Employee Details from tables with data to be copied – This will clear the tables in the target system if there is data in the table from the source system - Clear Employee Details from all selected “Data Copy” tables – Selecting this method removes data for the employee from the tables that have been selected to be copied, regardless of whether the employee has data in that table or not. <p>Note: For Employee Central copy, please refer to the Overwrite Options for Employee Central Copy section.</p>

2.3.5.2 Organisational Data and Posting Results Data Copy Option

When copying Organisation data or Posting Results Data, the only available option is the selection of the source/target systems.

2.3.5.3 Configuration Tables Copy Options

When copying Organisation data, only the selection of the source/target system is available.

2.3.5.4 Copy Options for File Output

The **Output to a file** or **Import from a File** options are:

- **PC File**
- **SAP Server File**

When copying from the current system to a file, users will be given an option to select the path to store the files. These will be stored upon execution of the report.

If the copy type **Copying from a file to the current system** is selected, this will allow users to specify the file path for the upload files. Once they have specified the path, there will be a list of **Copy**

Description options to select from. These will be the descriptions of the downloaded files that would have been specified when the original download to a file was performed.

2.3.6 Employee Selection for Copying Employee Master Data

The **Employee Selection** tab has two areas and three sub tabs. This tab is used to find the employees that will be copied. Users can find the employees by using the available filters and by using the filter values.

- Personnel Number
- Personnel Area
- Personnel Subarea
- Employee Group
- Employee Subgroup
- Payroll Area

After filtering, the **Hit List** button must be pressed to find the matching employees based on the set filter.

The following options are also available in the **Employee Selection** tab of Easy Clone.

- **Include Manager** checkbox - When selected, this will include the manager of the employee entered in the **Data Selection** fields when the **Hit List** button is pressed.
- **Manager Level** field - The user can enter the number of manager levels to include in the copy of the employee. By default, it is set to 1, which will copy the employee's manager. If the user wants to copy the manager of the employee's manager (e.g., *manager +1*), they can enter a value of 2.

Notes:

- The manager determination is based on and limited to the OM data, which relates to the replication between ECP and EC. This means that both systems are expected to be aligned in terms of employee-manager data.
- When executing a copy with these options, the managers will be copied first in the target system. Once that process is complete, the employees will be copied.
- The audit log of managers and employees will be saved/split into separate audit log numbers/IDs.
- Manager selection will be filtered if there are other selection criteria entered in **Employee Selection**, such as *Organisational Unit*. For example, if 2 is selected for Manager Level and the second-level manager belongs to another *Organisational Unit*, that second-level manager will be filtered out from the **Hit list** selection. This filtering is not yet available in the **Employee Selection** screen for Employee Central Only Copy.
- When executing a copy with Employee Central, the Manager's ID from Job Information (*EmpJob*) will also be updated with the new ID if the option to copy to a new number is selected.

2.3.6.1 Individual Employee Details

The first sub tab will allow users to select data through the following selection types (*this is described above*):

- Personnel Number
- Personnel Area
- Personnel Subarea
- Employee Group
- Employee Subgroup

- Payroll Area
- Employee Status
- Company Code
- Cost Center

2.3.6.2 Organisational Structure

This sub tab will allow users to select the employees to be copied from the Organisational Structure. Users may choose the employees by:

- Organisational Unit
- Position
- Job Key

2.3.6.3 Selection Period

This sub tab will allow users to define the period that the selection is to take place on. By default, the selection period is Today. Users can also enter in a different date range.

2.3.6.4 Employee Selection area

This will display the chosen employees to be copied based on the criteria entered from the **Data Selection** section. Users have the option to deselect employees if they do not want to copy particular employees. The data to be displayed will be in a tree structure which they can expand and collapse. It will be grouped by Payroll Area, Personnel Area, and Personnel Subarea.

Note: When moving data from a different SAP system, if the RFC does not have a password, users will be prompted to log into the remote system when searching for employees (*Hit List*). This will ensure that any selections of data return only data they are authorised to copy.

2.3.6.5 Customizing Employee Selection Criteria

Easy Clone provides users the option to add infotype fields into the selection through a configuration table. Available fields are pre-delivered by default and can be customised by the user via the **Employee Selection Criteria** section. This is accessed through **Edit** menu > **General Settings**.

The configuration (*customisation*) set in this section will then reflect in the **Employee Selection** tab.

The **Employee Selection Criteria** has the following options:

- **Manage individual employee selection criteria** - Selecting this option will direct the users to a screen where they can customize the list of infotype fields which will be used as selection criteria to retrieve employees.
- **Manage organisational structure selection criteria** - This option will lead users to a screen where they can customize the list of infotype fields which will be used as selection criteria to retrieve organisational structure.

2.3.7 Data to Copy for Employee Master Data

The **Data to copy** tab will allow users to select the data that is to be copied. The specific copy will use the employees selected on the **Employee Selection** tab, but this allows them to identify which specific sets of tables will be copied. Users can also select whether the data is to be scrambled as part of the copy.

2.3.7.1 Copying Employee Data

Employee Data comprises of some further sub-components:

- Payroll results – Users can choose if they want to copy any or all of the ff:
 - Payroll Results
 - **Note:** The **MOLGA 99 ISO code override** option is available in the dropdown selection of the **Options** column in the **Easy Reporter Options - /ALG/GENTK067** table (*accessed via SM30 transaction*)

This option allows users to override the **Values** column with **99 - Other Country** for this entry. It also enables the use of **Molga 99 - Other Country** when copying payroll results in cases where SAP updates the MOLGA ISO code.

Both the target and source systems must have this feature for it to function correctly.
 - De-clustered Payroll Results.
 - Payment Medium File (PAYR)
- Time Evaluation - Users can choose if they want to copy the Time Evaluation and/or de-clustered Time Evaluation.
- Audit Logs – Users can choose if they want to copy the Audit Logs. Both Long and Short Term documents are included as part of the copy.
- Infotypes
 - The infotypes will default to a predefined set of infotypes. These are pre-delivered by SpinifexIT but can be edited at the customer site.
 - The infotypes selected to be copied can be different per country.
NOTE: By default there is no need to alter the infotypes per country unless users need to vary the infotypes copied. The system will automatically pick the correct infotypes based on the country the employee is in.
- Travel Management - When copying Travel Management records, these are the available options:
 - **Copy Travel Management** - Ticking this checkbox will allow users to access the **Other Period** and **Changes (Delta)** options in the **Data Period** tab.
 - **Generate a new Trip Number**

Additionally, other Payroll Cluster Structures are aligned with the **PCL1 - TE HR Travel Expenses International** table in transaction code **SE16**, which allows users to copy Travel Management records from Non-Unicode system to S/4 HANA System.

- Cross Application Timesheets - Decide if users want to copy the Cross Application Timesheet (CATS) Records.
- The **Create Communication Infotype linked to original Employee** checkbox is located in **4. Data to Copy** tab > **General Employee Settings**.

This checkbox allows users to create a Communication Infotype that will be linked to the original employee during a migration process from a source remote SAP system.

Users may press the *F1* button to launch a help information pop-up for more information on the purpose of the checkbox.

2.3.7.2 Copying Organisational Data

Users can choose if they want to copy the Organisational data from the following options:

- **Generate new Object ID** - assign a new number to the unique eight digit numerical code representing the Object ID.
- **Assign to Default Easy Clone Structure** - assign the object at the top of the organisational structure, for an employee being copied, to an Organisational Unit created specifically for Easy Clone. The Organisational Unit is automatically created if it does not already exist.

For the data selections:

- **Plan Version** - The Plan version to obtain the Object by. Users can enter or choose a plan version. They can use the browse button to choose a plan version for the clone. The default is *01* Current plan.
- **Object Type** - The type of object for the data passed through to the Evaluation Path to perform the selection by.
- **Evaluation Path** - The code representing an Evaluation Path to select the objects by.
- **Object ID** - This field, if entered, provides the unique identification number of an Object to be supplied to the Evaluation Path on which to perform the selection of Objects on
- **Do not assign a new Central Person (CP) ID** - this will not assign a new Central Person (CP) ID during the copy process.
- **Display Objects** - This will show the object chosen directly from the Evaluation Path
- **Relationships** - This will show the relationships between objects.

2.3.7.3 Copy Payroll Posting Data

Users can choose to copy the payroll posting results with the following copy data options:

- **Generate new Number for Posting Run and Document Number** - Automatically assign a new number for the **Number of Posting Run (RUNID)** and **Document number (DOCNUM)** fields of the Payroll Posting data that is copied. These two fields are used to distinguish between the different Payroll Posting runs contained in a system.
- **Posting Run Number** - Users can enter the posting run number to include in the copy. Multiple entries can be made by clicking on the multiple selection button.

- **Clear link between Payroll and Posting Results (PCALAC)** - This removes the previously existing entries for an employee from the Activities per Payroll Result table (PCALAC). This indicator operates independently of the other Payroll Posting entries of this screen.

Note: When copying payroll posting data for selected employees, the original totals for all associated General Ledgers and Cost Centres are also copied for the selected posting runs. It is recommended to exercise caution when copying the posting documents to another system, as cost centre totals could potentially lead to identification of employee payments if a cost centre has limited employees (e.g. 1) within it.

2.3.7.4 Configuration Tables

Users can copy the following:

- Bank - Users can choose to copy the Bank Table
 - Bank Country Key - Type or choose a bank country key to use for the copy.

To assist with error handling in Easy Clone for Employee Central when cloning bank details (*i.e.*, *PaymentInformationV3* and *PaymentInformationDetailV3*), the system displays the message *"Invalid Bank Details. The given combination of Routing Number/BIC and Bank Country does not exist in the Bank data."* This message directs users to the relevant SAP Note, which provides guidance on identifying and resolving the issue internally.

- Customer Defined Tables - This menu allows users to copy custom tables. Customer Defined Tables can be country-specific or specified under all countries (non-country related).
 - All Countries
 - USA
 - Australia
 - Brazil (employee and non-employee related tables for Brazil eSocial configuration, with prefix T7BREFD*)
- German Tables - There are multiple german configuration tables.
 - Taxes Elster ELStAM
 - Social Security DEÜV
 - Pension Receipt Notification
 - Compensation Benefits EEL
 - Child Allowance
 - Social Insurance
 - Retirement Pension Plan
 - Statements Germany
 - Public Sector

2.3.7.4.1 Customer Defined Tables

Customer Defined Tables are added into Easy Clone by configuring them into the **Easy Clone Client Builder Tables** table (/ALG/DPORT_CBT) through the maintenance view /ALG/DPORT_VCBT that can be accessed via transaction **SM30**. The configuration setting for adding custom tables to Easy Clone prepares and adds the **Customer Defined Tables** subfolder under the **Configuration Tables** menu in the **Data to Copy** which will be used for cloning custom tables.

For this configuration, the **Customer Defined Tables** will be added under the following copy types:

- **EC_EE_COPY** (*Easy Clone Employee Tables*) - for employee-related copy
- **EC_CONFIG** (*Easy Clone Configuration Tables*) - for configuration-based (*non employee*)

When adding Customer Defined Table entries to the Easy Clone Client Builder Tables table, the following field settings are required for a Customer Defined Table to be properly processed:

Column Name	Field Value
Spinifex IT, General or Customer Indic (SPINIFEX)	This field should be left blank for a Customer defined entry.
Client Builder Copy Type (CB_COPY_TYPE)	Set to EC_EE_COPY or EC_CONFIG depending on the data. <i>Please see the table at the beginning of this article.</i>
Country Grouping (MOLGA)	<p>If users want to group a table under a specific country grouping, they can add that here by providing the Country code (e.g., 13 for Australia) in the field .</p> <p>For an employee-related copy, only those employees belonging to that country grouping will copy those specific tables. Leave it blank if the table will still be copied regardless of which country an employee belongs to.</p> <p>For a configuration table-based copy, the Country Grouping is just a way to separate tables. Any Customer Defined Table marked to be copied will be cloned regardless of the Country Grouping it is placed under.</p>
File Record Sequence Number (GROUPING)	Starting from 1, add 1 to this figure for each Customer Defined Table belonging to the same Copy Type and Country Grouping.
Link No (LINKNO)	Set as 1
Table Level (TAB_LEVEL)	Set as 1

Table Name (TABNM)	Users can enter the name of the Customer Defined Table to be copied by Easy Clone
Main Number (MAINR)	Set as 1
Personnel No Field Name (PERNR_FLD)	<p>For an employee based copy, enter the Field Name from the Customer Defined Table representing the Personnel Number. An employee based Customer Defined Table must contain a field representing the Personnel Number.</p> <p>Note: When Easy Clone performs an employee based copy it needs to know which field in the Customer Defined Table represents the Personnel Number. This field name should be entered in the Personnel No. Field Name column and Easy Clone will then use this field name to determine which records from the Customer Defined Table are related to the employee currently being copied. There must be a Personnel No. Field Name entry for a Customer Defined Table to be included as part of an employee based copy.</p>
Key Date Field Name (DATE_FLD)	For an employee based copy enter, the Field Name from the Customer Defined Table representing the Date Field used to validate entries to specific dates. It may be left blank if there is no such field. This field only comes into play when performing an Other Period based copy

2.3.7.5 Copying Country Specific Data

Countries with specific data or infotypes that do not exist for other countries can be included in a copy. Currently, the only available country specific data is for copying Single Touch Payroll Data for Australia.

2.3.7.5.1 Copying Single Touch Payroll Data

Copying Single Touch Payroll Data is turned on by default. If the employee being copied is not an Australian employee, Easy Clone will skip the Single Touch Payroll Tables

2.3.7.6 Data Period

Users can choose the time period over which the data to be copied will be chosen.

- **All History** - This is the default selection. Easy Clone will copy all the data as it used to do.
- **Other Period** - Users can enter a Start Date and an End Date to specify which data are valid for copying.
 - **Time Slicing copy** - This will use the date inputs in the **Other Period** option. This means that if the dates on the record match the date range provided by the user, the record will be included in the copy. Moreover, an entity with no configured validity date (*e.g., no Start date and End date field or Effective dates*) will still be included in the copy without any date filter.
- **Changes (Delta)** - default to Previous Run. Users can choose other dates based on old Easy Clone execution dates.
 - **Delta copy** - This will use the date input in the **Changes(Delta)** option. This considers the modified date of the record. Any entity record modified after the user's delta date input will be included in the copy.

Through the Time Slicing copy and Delta copy, users can easily duplicate Employee Central (EC) data, selecting either data modified after a certain date or data set to become active on a specific date.

2.3.7.6.1 Subset Options

The **Subset Options** section allows users to copy specific payroll results. It has the following features:

- An alert to inform users to be cautious when using the **Subset Options**
- Delete all History - This is intended for subset data use. When ticked, existing records will be deleted before inserting the new subset records.
- Consolidate HR Cluster 2 Payroll Directory (PCL2) with Payroll Results Table (HRPY RGDIR) - This checkbox function will filter the Payroll Result directory (PCL2 CU) based on the subset date range selected in the screen (see 3rd bullet below). Both tables will then have the same result.
- Payroll Date Reference - This is used to determine which date field will be used for filtering. The options from this dropdown list are:
 - **Run Date (default)**
 - **Pay Date**
 - **In-period Date**
- Align Overlapping Infotype End Date to match current period End Date - This checkbox is used to alter End Date of Infotypes when copying legacy data to production.

The Source and Target systems must be on the same version with the change request included for the copying Subset Options feature to work.

2.3.7.6.2 Time Period and Subset Options

Below summarizes how Time Period and different Subset Options work together:

- Overwrite All

Overwrite Option: <i>Overwrite All</i>	Data Period: <i>All History</i>
<p>This will remove records from all tables known to Easy Clone regardless if they:</p> <ul style="list-style-type: none"> • were selected or not selected • had incoming data from the source system or none at all <p>The Data Period will control which records will be deleted in the target system. Meanwhile, subset deletion will offer some flexibility with the deletion behavior when a subset date is provided.</p>	<p>All records from all tables known to Easy Clone will be deleted.</p> <p>This means the target system tables will be replaced completely:</p> <ul style="list-style-type: none"> - If the source system table has data, then the target system table data will be completely replaced. - If the source system table has no data, then the target system table data will appear to be wiped out.

Overwrite Option	Data Period	Subset Deletion
Overwrite All	Other Period	<p>Delete records covered by subset dates</p> <p>Only the records that fall within the subset date from all tables known to Easy Clone will be deleted.</p>
Overwrite All	Other Period	<p>Delete all history</p> <p>If subset deletion is set to <u>Delete all history</u>, all records from all tables known to Easy Clone will be deleted.</p>

- Overwrite Select

Overwrite Option: <i>Overwrite Select</i>	Data Period: <i>All History</i>
<p>This will remove records from all tables currently selected in the copy regardless if they had incoming data from the source system or none at all. This is like Overwrite All but with just a limited number of tables - those that are only selected.</p> <p>The data Period will control which records will be deleted in the target system. Meanwhile, subset deletion will offer some flexibility with the deletion behavior when a subset date is provided.</p>	<p>All records from the currently selected tables will be deleted</p> <p>This means the target system tables (<i>currently selected</i>) will be replaced completely.</p> <ul style="list-style-type: none"> • If the source system table has data, then the target system table data will be completely replaced. • If the source system table has no data, then the target system table data will appear to be wiped out. Unselected tables will remain intact.

Overwrite Option	Data Period	Subset Deletion
Overwrite Select	Other Period	<p>Delete records covered by subset dates</p> <p>Only the records that fall within the subset date from the currently selected tables will be deleted.</p>
Overwrite Select	Other Period	<p>Delete all history</p> <p>If subset deletion is set to <u>Delete all history</u>, all records from the currently selected tables will be deleted.</p>

- Overwrite Found

Overwrite Option: <i>Overwrite Found</i>	Data Period: <i>All History</i>
<p>This means that a target system table can only be modified if there is data coming in from the source system table. Said tables must also be selected in the first place.</p> <p>The data Period will control which records will be deleted in the target system. Meanwhile, subset deletion will offer some flexibility with the deletion behavior when a subset date is provided.</p>	<p>All records from a given table in the target system will be deleted if:</p> <ul style="list-style-type: none"> • The table is included in the copy. Unselected tables will remain intact. • The table contains data in the source system. Tables that do not have data in the source system will not cause the target system table to be reset or wiped out.

Overwrite Option	Data Period	Subset Deletion
Overwrite Found	Other Period	Delete records covered by subset dates If there is data found in the source system, the records that fall within the subset date will be deleted in the target system table.
Overwrite Found	Other Period	Delete all history If subset deletion is set to <u>Delete all history</u> and there is data found in the source system, all records will be deleted in the target system table

- Consolidate HR Cluster 2 Payroll Directory (*PCL2*) with Payroll Results Table (*HRPY_RGDIR*)

After the records to be deleted are removed, the consolidation of the directory will take place if the user has ticked the checkbox for this functionality. Leaving this checkbox unticked will move the entire **HR Cluster 2 Payroll Directory** (*PCL2*) as it is.

It has the following considerations:

- It is not compatible with **Data Period** - All History because in this option, everything is copied from the source system into the target system.
- Subset date use can produce 2 different outcomes depending on the subset deletion.
 - If all history is deleted then the target system's payroll directory will be wiped out and will be replaced with just the source system records that fall within the subset date.
 - If deletion is limited to just subset dates then it is possible to have the target system's payroll directory to have both records from the 2 systems.
 - Those that are outside the subset date will not be affected in the target system.
 - Those in the target system that are within the subset date will be replaced by the records from the source system.

2.3.7.7 Data Source

Easy Clone is designed to copy SAP HR and Payroll master data, history, and results. Easy Clone is capable of copying most common tables. However, due to the number of different tables and types of data that exist across many local country versions of SAP, not all tables are copied. The following is a guide to exactly what kind of data is copied.

Data Source	Description
Personnel Administration (PA) Infotypes	<p>All Infotypes can be copied. These include any custom infotypes that may have been added by the customer.</p> <ul style="list-style-type: none"> - Infotype 0798 - linked with the T7DK_REFU_BARKIV (Denmark-specific) table - Infotype 0573 - linked with table T5QPBS2M
Additional PA Tables	<p>For some infotypes, additional tables exist and these are also copied:</p> <ul style="list-style-type: none"> - Assignment of HR to AFRU/ASSOB (ASSHR) - Assignment Objects (ASSOB) - Deduction of Time Quotas (PTQUODED) - Sequential Number for PDC Messages (PDSNR) - STXD SAPscript text file header (STXH) - STXD SAPscript text file lines (STXL) - Additional Data for Time Events (TEVEN and TEVEN_MORE)
Personnel Development (PD) Objects and Relationships	<p>All PD objects and relationships can be copied. However, by default, this is initially limited to the key objects (O, S, K, P)</p>
PD Infotypes	<p>All PD infotypes, including custom PD infotypes, can be copied.</p> <ul style="list-style-type: none"> - Based on configuration, HRTnnnn and HRITABNR tables and linked with additional data HRPAD. - Infotype 1001 - linked with the HRIADATANR table
Additional PD Tables	<p>The following additional PD tables are also copied:</p> <ul style="list-style-type: none"> - Organizational Units (T527X) - Positions (T528B) - Position Texts (T528T) - PLOG File Index (PLOGI) - Canada Classification Groups - T5KWB - Qualification Keys – T574A - Qualification Names – T574B - Jobs table – T513 - Jobs Titles Table – T513S - Jobs Table – T5U13 - WC: Assignment to Org Unit – T5U26 - WC: Position Attributes – T5U28
Payroll Cluster Information	<p>When copying the Payroll results, Easy Clone will determine the Country Grouping for the Employee; and for this, it will read the specific Relationship ID for that country. The specific Relationship IDs copied will be determined by looking up the table T500L (<i>for the country grouping</i>). Only those linked to the country (<i>unless otherwise specified</i>) will be copied. Once the Relationship ID</p>

	<p>is determined, all cluster directory entries for the employee and the selected date range will then be copied.</p> <p>For each cluster, all of the Tables Contained in that Cluster will be copied to the new employee. Essentially, this is the data that users would see when running the Display Payroll Results (<i>transaction code PC_PAYRESULT</i>). As this is different for every country, tables are not specifically listed here. However only these tables are copied unless we specifically mention other tables in this document. This includes any customer specific tables that might have been created.</p> <ul style="list-style-type: none"> - PCL2 – CU (Cluster Directory) - PCL2 – Country Specific Cluster Tables (Based on T500L Relationship ID Lookup)
Additional Payroll Tables	<ul style="list-style-type: none"> • Directory for Payroll Results (HRPY_RGDIR) • HR-PAY: Transparent Table WPBP (HRPY_WPBP) • Activities per Payroll Result (PCALAC) – Entries may be removed, not actually copied • Tax Reporter Employee Index Table (T5UX1) • Group Certificate Overrides Table (T5QGO)
Time Evaluation Cluster Information	The time evaluation clusters (B2) are copied with all tables contained within these clusters.
Other Cluster Tables	<p>The following additional tables will be copied:</p> <ul style="list-style-type: none"> - PDC Data - PCL1 (B1) table - Personnel Calendar – PCL1 (PC) - Texts for PREL – PCL1 (TX) - HR Travel expenses international – PCL1 (TE) - Australian Advanced Pay – PCL2 (Q3) - New Zealand Advanced Pay – PCL2 (N1) - IR8A Results(Singapore) – PCL2 (R1) - Time wage types/work schedule – PCL2 (ZL) - BAV-/Pension Certificate (Germany) PCL2 (DB) - Garnishments (Germany) PCL2 (DP) - Garnishment directory (Germany) PCL2 (DQ) - DUEVO messages part-time employees (Germany) PCL2 (DG) - DUEVO messages (Germany) (DK) - Garnishment Principle of Origin: Shadow Cluster PCL2 (DR) - Garnishment Principle of Origin: Directory Shadow Cluster PCL2 (DS) - Garnishment Principle of Origin: Shadow Cluster Saving PCL2 (DT) - DUEVO notifications, O record PCL2 (DU) - Garnishment Prin. Origin: Directory Shadow Cluster Saving PCL2 (DV) - DUEVO file number (Germany) PCL2 (DZ)
Audit Logs	<p>The SAP Infotype Audit Logs are copied, including:</p> <ul style="list-style-type: none"> - Long Term – PCL4 (LA) - Short Term – PCL4 (SA)
Travel Management	The following Travel Management tables will be copied

	<ul style="list-style-type: none"> - General Trip Data (PTRV_HEAD) - Period Data of a Trip (PTRV_PERIO) - Trip Statistics - Add. Receipt Data (PTRV_SADD) - Trip Statistics - Batch/Backlog Processing (PTRV_SBACKLOG) - Trip Statistics - Cost Assignment (PTRV_SCOS) - Trip Statistics - Trip Amounts (PTRV_SHDR) - Trip Statistics - Receipts (PTRV_SREC) - Assignment of Trip Results to Posting Doc. Number and Line (PTRV_ROT_AWKEY) - Transfer Travel -> FI/CO: Lines of TRV interim. document (PTRV_DOC_IT) - Travel Request Item - Car Rental Service (FTPT_CAR) - Rental car service preferences of a travel plan (FTPT_CAR_PREF) - Rate components (FTPT_FARE_COMP) - Rate Rules (FTPT_FARE_NOTE) - Travel Request Item - Flight Service (FTPT_FLIGHT) - Assignment table: flights <-> rate components (FTPT_FLIGHT_FARE) - Assignment table: flights <-> rate components (FTPT_FLIGHT_FCMP) - Leg of flight (FTPT_FLIGHT_LEG) - Flight service preferences of a travel plan (FTPT_FLIGHT_PREF) - Ticket information (FTPT_FLIGHT_TST) - Ticket Information (FTPT_FLIGHT_TSTK) - Travel Request Item - Hotel Service (FTPT_HOTEL) - Hotel service preferences of a travel plan (FTPT_HOTEL_PREF) - Travel Service Request Item (FTPT_ITEM) - General Plan Data (FTPT_PLAN) - Elements of passenger name records of travel plan variant (FTPT_PNR) - PNR delivery / billing addresses (FTPT_PNR_ADDRESS) - Name element of PNR (FTPT_PNR_NAME) - Other PNR service information (FTPT_PNR_OSI) - PNR telephone references (FTPT_PNR_PHONE) - PNR remarks (FTPT_PNR_REMARKS) - Special PNR service requests (FTPT_PNR_SSR) - Travel Request Cost Assignment (FTPT_REQ_ACCOUNT) - Travel Request Advance (FTPT_REQ_ADVANCE) - Framework Data of Travel Request (FTPT_REQ_HEAD) - Reason for Travel Request (FTPT_REQ_REASON) - Travel Plan Requests (FTPT_REQUEST) - General Services (FTPT_SERVICE) - Memo table for Travel Management (FTPT_TM_MEMO) - Travel Request Item - Train Service (FTPT_TRAIN) - Train service preferences of a travel plan (FTPT_TRAIN_PREF) - Info texts for travel plan variants (FTPT_VAR_INFO) - Table of Travel Plan Variants (FTPT_VARIANT)
Cross Application Timesheet	<p>The following Cross Application Timesheet (CATS) tables will be copied:</p> <ul style="list-style-type: none"> - CATS: Database Table for Time Sheet (CATSDB)

	<ul style="list-style-type: none"> - Cross-Application Time Sheet (CATS): Transfer to HR (CATSHR) - Interface Table for Attendances/Absences Infotype(2001/2002) (PTEX2000) - Interface Table for IT 2003: General Information (PTEX2003GEN) - Interface Table for IT 2003: Interval Information (PTEX2003SPEC) - Interface Table for EE Remuneration Info. Infotype (2010) (PTEX2010) - Interface Table for Infotypes (Directory Table) (PTEXDIR)
Payroll Posting Data	<p>The following Payroll Posting Data tables will be copied:</p> <ul style="list-style-type: none"> - Payroll Posting Runs (PEVST) - Index of Payroll Result Lines -> Posting Lines (PPOIX) - Activities per Payroll Result (PCALAC) - Index of Old <-> New Document Lines for 'P' Results (PPOPX) - History of Payroll Posting Runs (PEVSH) - Attributes for Posting Runs (PEVAT) - Transfer to Accounting: Index Table for HR IDOCs (PPDIX) - Transfer to Accounting: Document Header (PPDHD) - Transfer to Accounting: Lines in HR IDOCs (PPDIT) - Payroll Posting Document: Status History (PPDSH) - Transfer to Accounting: Substituted Acc. Assign. Object (PPDST) - Transfer to Accounting: Table of Error Messages (PPDMSG)

Note: Easy Clone will copy data for all countries. Please refer to the data sources area for the data that is specifically copied. If users would like to verify which countries Easy Clone is being used for currently, they should contact the SpinifexIT Sales representative.

2.3.7.8 Scrambling Data

Scrambling data when copying data in Easy Clone is possible. This means that when copying data from one employee to another (*across systems or within the systems*), certain data can be replaced. For example: To protect the privacy for an employee, items such as the First Name, Last Name, Gender, Birth Date, Address, Position, Organisational Unit etc can be replaced with different values.

By default, the Easy Clone product has scramble settings pre-defined when the tool is delivered. However, for infotypes, users can also override the scramble settings and add/delete these as they require.

Users can tick the checkbox to turn on the scrambling option or not. Below are the following scramble settings.

2.3.7.8.1 Scrambling Data General Settings

Users can enter in a name to use when copying the particular employee(s). This will allow them to quickly select the name to replace. Users can also add a number to the previous First Name / Last Name, to keep the name unique.

For example: copy 10 employees and start their Last Name with 'CASE 12344 #1', 'CASE 12344 #2', 'CASE 12344 #3' etc.

2.3.7.8.2 Infotype Settings

It is possible to add new scramble rules, modify or delete the existing ones, change the order of the scramble rules, alter the settings from the values table, upload scramble settings from the clipboard or a file, and load scrambling fixed values from text file or from clipboard (*copy-paste*).

The default scramble settings that are delivered as part of the base product are listed below.

- Organisational Assignment Infotype (0001) – Employee Name details
- Personal Data Infotype (0002) – Various Employee Name details, Birth Dates, and Social Security Number details
- Addresses Infotype (0006) – Various Address Details
- Bank Details (0009)
- Family Member/Dependents Infotype (0021) – Various Name details
- Personal Data (0108)
- Superannuation Aust Infotype (0220) –Member Number
- TFN Australia Infotype (0227) – The Australian Tax File Number
- In addition, details recorded in the Payroll Results are also Scrambled

Users can limit the infotype of the country to be scrambled. They can also have default (All Country) scramble settings, or can create different scramble settings per Country. It is possible to reset the scramble rules back to the default “SpinifexIT” pre delivered settings, if they require.

2.3.7.8.3 Other Table Settings

The **Other Table Settings** options can be used for setting a scrambling configuration for standard and customer tables such as *Employee* and *Configuration* related tables that are non-infotype tables. Users can utilize the **Limit Table** and **Limit Country** fields to filter the entries in the table display/view. *Note:* Infotype tables are restricted from this tab. Even if users try to enter an infotype table, for example PA0002 SAP HR Master Record, the entry will just be cleared and will not be saved.

2.3.7.8.4 Employee Central Settings

Scramble Settings Tab

The **Scramble Settings** tab in Employee Central Settings is accessed via the **Scramble Settings** button in **Data to Copy tab** in Easy Clone. It enables data anonymization and processes only when the **Scramble Data** checkbox is selected in the **Data to Copy** tab.

Additionally, the **Export** and **Import** functionality operates the same when using the updated Scramble Setting screen.

The **Scramble Settings** tab includes the following columns:

- Disable
- Country
- Entity Name
- Short Desc
- Sequence

- Entity Field
- Field Desc
- Scramble Settings
- Scramble Method
- Scramble Value 1
- Scramble Value 2
- If Blank
- If Null
- Timing

Generic Tab

The **Generic** tab in **Employee Central Settings** is available for configuring common routines, such as mapping Person ID or User ID for each entity.

It processes data even if the **Scramble Data** checkbox is not selected.

The **Generic** tab includes the following columns:

- Disable
- Country
- Entity Name
- Short Desc
- Long Desc
- Sequence
- Entity Field
- Field Desc
- Transformation Settings
- Trans Meth
- Transformation Value 1
- Transformation Value 2
- If Blank
- If Null
- Timing

Additionally, the following buttons are available in both the **Scramble Settings** and **Generic** tabs in the **Employee Central Settings** tab:

- Add Row - Inserts a new, blank row to allow data entry
- Delete Row - Removes the selected row
- Set Filter - Allows users to modify the list of displayed scramble settings.
- Delete Filter - Resets the filter and displays all records in the Scramble Settings table.
- Store to default - Saves the scramble settings as the system-default scramble settings.
- Undo all changes - Reverts all the current changes in the table and reloads the system-default settings.
- Reset to Predelivered - Reverts all the current changes and system settings to the pre-delivered settings.

2.3.8 Running the Copy Process

The last step of a copy is to run the clone. This can be Run in Foreground or In Background (Immediately). It can also be Scheduled in Background to Run at a particular time.

Note: Background runs are possible only if the Remote Function Call (*which connects the systems together*) contains the password hardcoded in it.

When ran, it will do the following:

- It will connect to the system that the data is being copied from
- It will determine that the system where the data is being copied to is not a production system
- It will perform a number of checks to ensure the data can be transferred successfully
- For each employee it will
 - Select the Data to be Copied (based on users' selections) from the Source System
 - Scramble (if required) the various details as chosen
 - Write the (Scrambled) data to the Target System

Finally, a Run Log is produced giving a brief summary on the details of the copy. Easy Clone run log can be viewed as an ALV table. With this feature, the user can print the log or export it to a different file format.

In the Run Log, the log for the employees with SuccessFactors indicate which entities encountered an error. This helps the user to determine which employees were not fully copied in SuccessFactors -Employee Central data and for them to easily troubleshoot which entities to check.

1. Run Log with Employee Central Data Copy

- Both Successful and Errored run results will show 2 nodes:
 - Employees with Employee Central
 - Employees without Employee Central

The 2 nodes will show if the **Copy Employee Central Data** checkbox from tab **4. Data to Copy** is flagged when copying SuccessFactors - Employee Central Data.

2. Replication Process error is shown in the log.

- For Login and Query Error, users will get this message: Unable to retrieve Employee Key Mapping data
- For Parsing Error, users will have this message: Unable to process Employee Key Mapping Data

When copying Client Builder Data, after the copy has finished, a list of the copied configuration tables will be displayed.

2.3.8.1 Job Splitting

When running Easy Clone, users can set the number of jobs to split so that when copying large numbers of employees, the copy process will not take a long time. The number of jobsplits is set through the **Run Options** button. Once set, Easy Clone will automatically split a single copy into a number of copies that will all run simultaneously (*depending on available resources*) resulting in a shorter runtime. This is also available when copying Employee Central Data.

Note: This option is only available when running an employee based copy that is not using a file as the transfer method. Job splitting extends to ensure that subsequent job runs follow the splitting functionality,

similar to the initial run. It applies to all executions of recurring scheduled jobs to improve performance for subsequent executions.

Easy Clone can process data that exceeds 1000 records for SuccessFactors (SF) without having the need to break up the process into different job splits.

2.4 Other Functionalities

2.4.1 Variants

It is possible to set up Easy Clone, select particular settings, and then save these as a Variant. This will allow the user to select a variant and all of the previous Easy Clone Settings will be loaded up.

Users can also include the ability to store the scramble settings as part of the variant. However, they can also just save the Easy Clone settings without the scramble settings so that the user can load up the variant (*which will pick up the screen options*), but to use the default scramble settings that are available at runtime of the Easy Clone.

Variants can be further managed by navigation to the **Edit > Variants** tab. This tab provides three options for management of variants:

- **Remove**
- **Upload**
- **Download**

2.4.2 Display Background Jobs

Easy Clone can also view the copies that were performed using the Easy Clone when run in background. This shows a real-time status of the background job and details on who performed the copy and when the background copy was commenced and finished. The Run Log produced from the background copy may be viewed through this process.

2.4.3 Adding Employee and Configuration Tables in Easy Clone

Within Easy Clone, a copy may include customer-specific tables (*or even standard SAP tables*).

These might be tables that are linked to an employee or configuration tables that are standalone.

This feature offers an easy way for users to add new Employee tables and Configuration tables through simple configuration steps that are part of the following **Edit > Easy Clone** menu:

- Adding Employee Tables
- Adding Configuration Tables

Once a table is added, the table will be included in the **Customer Tables** folder a. If there are secondary tables linked to a customer table, these tables will appear in a dedicated section. Users can also save this as a country-specific setting by choosing the country in the **Country Group** field. After adding the changes here, users can then copy the customer table in the **Data to Copy** tab.

2.5 Easy Clone for Migration

2.5.1 Setup Production Update

Users have to set up a *production update transport* in order to copy employee data to production. Users need to create a transport to assign information that will be used when updating the employee data into production, such as authorized user, password, schedule, and duration. This includes several steps that should be completed via **Edit > Easy Clone > Setup Production Update**.

Note: The setup should be done in the Development system and then transported to Production.

In the **Setup Production Update** menu, users must do the following actions under the given sections to create a production update transport:

- **Set user(s) who can copy employees to production** by entering the username/ID of the authorized production user.
Set Production Start Date and Time Note: Before setting up the Production Start Date and Time, it is recommended for users to view the System's Time Zone which can be found via SAP transaction codes SU3 and SU01D. This will help ensure that end users have clear understanding on when the system will actually allow and stop the ability to copy data to Production.
- **Period of time that this is available** - Set the duration of the production update.
- **Options for update** - Allows overwriting existing employees in production but this should be used only when needed and with extreme caution.
- **Password** - The assigned password will be used with the production update.

2.5.2 Copy Legacy Data to Production

Users can migrate their employees from the legacy system into production. The Copy Options and Data to copy tabs are used when copying employee data to a production environment.

Note: Copy of data requires both source and target systems to be on the same release version.

The following features enable users to specifically copy legacy data to production:

- **Create New Employee Number** - Users can create a new employee number based on the original employee number and a specified prefix. In the **Copy Options** section under the **Copy Options** tab, users can specify the prefix of the new employee number in the field provided for **Create based on original number (With Prefix)** option. This option will create new employees in the system instead of updating the existing ones.
- **Create Communication Infotype Linked to Original Employee** - An option to link the new employee number to the original employee number via *Infotype 01015 - Communications*, using a specified subtype is provided under the **General Employee Settings** section of the **4. Data to Copy** tab.
- **Alter End Data of Infotypes During Copy** - Users can set an end date for infotypes by aligning overlapping infotypes to match the specified current period end date. This is done in the **4. Data to Copy > Data to Period** tabs. **Other Period** should be selected before specifying the dates in the fields provided. This will copy all payroll results and infotypes between the dates specified.

For infotypes overlapping the dates (*especially the end date*), select the **Aligning Overlapping Infotype End Date to match current period End Date** checkbox to prompt the system to change the end date based on the end date specified in the **Other Period** field.

2.5.3 Copy Employees - Updating Customer Numbers/Activation Codes

Copying employees from one system to another requires customer numbers/activation codes that should be unique for each system. This is necessary to be able to determine which system is the source and the target. The customer numbers/activation codes should be different for the employee copy to process properly.

Users can directly update the customer number to proceed with the employee copy even if there is no access to external activation servers or no **Remote Function Call (RFC)** to update.

2.6 Administrative Functionality

2.6.1 Security

The Easy Clone has the ability to set up security (*if required*).

Define User Roles	<p>Users can create, copy, and delete roles. Each role defined can be set with the following security options:</p> <ul style="list-style-type: none"> - General Settings <ul style="list-style-type: none"> - Limit the number of employees to be copied at the one time - This means that if users fill this out for a particular user, they will only be able to copy the number of employees they specify here in one go. If they entered 5 here, the users assigned to this role would only be able to copy 5 employees at a time. - Cannot upload or download a file - If this is selected, the Save to File and Load from a file options will be disabled. - Role is allowed to use RFCs marked for background jobs - Users can define the RFC that they can use, and these can be limited so that they cannot run background RFCs that might have passwords and UserIDs entered against them. - Enable Cloning using Other Period/Changes (Delta) - When Other Period is selected, users can enter a start date and an end date. For Changes (Delta, they can select which period will be used for the run. - Administration <ul style="list-style-type: none"> - Whether the user has access to the user administration menus or not - Whether the user can access and alter the Audit Log Settings - Whether the user can delete the Easy Clone files (That are used in the upload / download process) - Whether the user can delete the Variants - Whether the user can delete the Audit Logs - Whether the user is allowed to see and export the log table
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	<ul style="list-style-type: none"> - Scrambling <ul style="list-style-type: none"> - Identify whether the user can alter the scramble options at runtime. If this is unchecked, they will be able to see the scramble settings but not alter them - Whether the user has the ability to save the scramble settings back to the base scramble options. - Whether the scrambling is turned on always for this role, turned off always for this role, defaulted to turned on, or defaulted to be turned off.
Assign Users to Role	<p>The assigning of the users to the role will be at the SAP UserID level and this setup will be performed in production. Alternatively, the roles can be assigned to SAP roles so that if anybody has a particular SAP role, they will be automatically assigned an Easy Clone role. If the user is not assigned to any roles, then they have no access to Easy Clone functionalities.</p> <p>Setting Filter - The Assign users to roles screen has a Set Filter button added which allows for filtering the list of users to be assigned into Roles. The filter option permits multiple lines, ranges and wildcards.</p>
Link SAP Roles to EC Roles	<p>Easy Clone roles can be assigned to SAP Security roles, in this way a user can have several roles. The effective permissions are the sum of all the permissions in each role.</p>
Set Defaults for EC User Access	<p>This allows setting up the default access for those users who do not have any role assigned. There are two options available:</p> <ul style="list-style-type: none"> ○ Full access - this is the default option if no user admin has been configured. ○ No access - Once a user admin is configured in the system, the option should be switched on to “no access”.

2.6.2 Audit Logs

Easy Clone has its own Audit Log showing the data that was included in the copy. By default, only data that was unable to be copied is shown in the Easy Clone Audit Log. However, users can configure this to show more or less of the data depending on their requirements.

It details such information as who performed a copy and when such a copy was made. It can record and show the various tables that were copied and the records from those tables. To protect the sensitive nature of some of the data that is copied, only the keys to the records of the various tables are displayed through the Easy Clone Audit Log.

Easy Clone Audit Log records may be cleared when no longer required.

For cloning SuccessFactors data, the audit logs screen mimics the OData API Audit Log from the SuccessFactors portal with the four tabs being present.

2.6.2.1 Audit Log Report

Users can select a dataport audit sequence number from their logs and generate a report for it. When reporting an audit log, users can also define which tables to be included in the report, and they have an option to just produce a table summary.

Additionally, this option is also accessible within the **Audit Log** screen. Simply select a row, and then click on the **Audit Log Report** button. The difference is if accessed from there, the Audit Log Report will contain all the details as opposed to the Menu Accessible Audit Log Report where users can customize which tables to report and if only summaries are desired.

2.6.2.2 Audit Log Report History (Table Cleanup)

Easy Clone has an audit log utility program (*/ALG/PG_DELETE_EC_AUDIT_LOGS*) that automatically cleans up entries in **Easy Clone Audit Log Tables** (*ALG/DPORT_AUDF, /ALG/DPORT_AUDD, /ALG/DPORT_AUDSF, /ALG/DPORT_AUDH and /ALG/DPORT_AUDS tables*). A cleanup utility is beneficial in overseeing the expansion of audit log data by eliminating older and less relevant entries, thereby optimizing storage and sustaining the performance of the database.

The *clean up program* for Easy Clone Audit logs is called (by */ALG/CLEAN_GEN_PROGRAM utility program*) on the first instance Easy Clone is initiated each day.

When the Easy Clone clean up program is executed, impacted records in the relevant Easy Clone audit log tables will be deleted.

The number of days to retain the Audit Log History is maintained in the **General Settings** screen.

2.7 Easy Clone Utility Configuration

In addition to the options already discussed in this document, Easy Clone has some configuration that can control how it works.

RFC Destinations	<p>The various RFC Destinations available to Easy Clone can be configured. This also allows for the RFC Destination to be configured as to whether it may be written to and/or copied from. The maintenance view to enter the RFC Destinations applicable to the Easy Clone is - <i>/ALG/DPORT/VRFC</i> that can be accessed via transaction SM30.</p> <p>For Employee Central, an additional table is needed to be configured via SM34 - <i>/ALG/DPORT_SFCON</i> where a SAP RFC system can be paired to a SuccessFactors RFC Connection.</p>
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Default Infotypes	<p>Easy Clone is shipped with a number of Infotypes offered to users as those indicated to be initially copied (this may be changed every time they actually run Easy Clone, however the configuration just offers a default starting point as to the various Infotypes that will be copied). Users may wish to modify this list if they have custom Infotypes or others that are generally always maintained, and they would wish these to be copied by default.</p> <p>The maintenance view to enter the default Infotypes initially marked as to be copied is called /ALG/DPORT_VDINF.</p>
Maintain Default Settings	<p>The Maintain Default Settings table (/ALG/DPORT_STNG) has a number of values in it. The details maintained in this table can be viewed and maintained through Transaction SM30 using the Table/View /ALG/DPORT_VSTNG. Default settings include the following:</p> <ul style="list-style-type: none"> ○ Audit log of the data port utility ○ Object type to use when copying PD Data ○ Evaluation Path to use when copying PD Data ○ Data port utility release number ○ File/Field Differences between systems ○ Full access if user does not have any role ○ Object type to use when only copying PD Data ○ Data port utility organisational unit at Top of Structure ○ Evaluation path to use when only copying PD data ○ Number of cycles to Search through when copying PD Data
Default File Location	<p>When Saving To or Copying From a File users may set a default File Location. This can be either of the two:</p> <ul style="list-style-type: none"> ○ PC - Use files on the personal computer of the user ○ Server - Use files on the SAP application server.
Default File Path	Tied in with the default File Location a Default File Path may be supplied specifying a default path (or folder/directory) where files are to be stored.
Overriding Delimiter for the PC	By default, when using files on the PC of the user, the delimiter is used to separate paths is the backslash (\). If this delimiter is not appropriate for the operating system of the PC, users may supply a different delimiter through this item.
Overriding Delimiter for the Application Server	By default, when using files on the Application Server the delimiter as used to separate paths is generally the forward slash (/) except on a Windows NT system where the default is the backslash \. If neither of these delimiters are appropriate for the operating system of the Application Server then another may be supplied through this item.
Turn off File/Field checking between systems	One of the pre-checks of Easy Clone before performing a copy, is to ensure that the tables that are about to be copied are defined exactly the same between the Source and target systems. This check can be time consuming so to speed up the processing it is possible to turn this check off.
Scramble Indicator initial value (Data to Copy)	<p>The default setting and access for the Scramble indicator can be configured with the following:</p> <ul style="list-style-type: none"> ● ON or OFF - means that it is initially switched to On or Off, but can be changed. ● ON_LOCK or OFF_LOCK -means that it is ALWAYS ON or OFF, and cannot be changed.

File Scramble Indicator Initial Value (Copy options)	Configured settings for this are the same as the one above (Scramble Indicator Initial Value (Data to Copy)).
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2.8 Activation Parameters in Easy Clone General Settings

Activating the SpinifexIT solution is usually done through a specific SAP transport, containing an activation key for each individual product users have purchased.

Activating SpinifexIT solutions can be performed using a remote method, which includes entering a unique customer number that is supplied by SpinifexIT in the SAP/ECP system. This will be used to access our License Server to validate which solution users are authorized to use and for what period.

The following activation parameters are available in Easy Clone **General Settings**, under **SpinifexIT Products - Activation Settings** section:

- Disable Usage Logging
- Secure (*HTTPS*) call to Activation Server - requires SSL certificates to be installed.
- Use RFC Destination (*Required if there is a proxy server connection*)

A selection feature is also available for this field. Users can filter the list by entering a value in the **Connection Type** field. This helps narrow down the RFC Destination entries based on a connection type. This window displays a list of available RFC Destination entries, which becomes visible after clicking the check icon. Once an RFC Destination is selected from the list, the chosen entry is displayed in the field.

2.9 Country Grouping Override for Payroll Cluster in General Settings

The **Country Grouping Override** section is available in the **General Settings** screen of Easy Clone. This feature allows users to configure and override **Country Groupings** values when cloning from systems with outdated country groupings. This is especially helpful for cases where the source and target systems use different *Country Grouping values* for the same country.

This section allows users to maintain override entries for **Country Grouping** values, including specifying the original and new values, and enabling or disabling each override.

The following settings are available for use:

- **Insert Row / Delete Row** - Options to maintain the list of Country Grouping Override configuration.
- **Country Grouping** - The column where the original value from the source system is displayed, with a Value Search Help (F4) button available for selecting from a list of possible values.
- **Enable Override** - A checkbox that activates the override, allowing the value in the **New Country Grouping** column to be used during cloning. When left disabled, the original **Country Grouping** is retained.
- **New Country Grouping** - The column for the replacement value that will be applied during cloning, with a Value Search Help (F4) button also available for selection.

Notes:

- Trying to Save the configuration while there are blank columns will display an error message.
- Entering invalid values in the Country Grouping columns and saving the configuration will display an error message.
- Only one override can be defined per Country Grouping. If multiple overrides are defined for the same original value, an error message will be displayed when saving the configuration.
- If the structure of the original Country Grouping is not aligned with the New Country Grouping defined, Easy Clone will encounter an error during cloning, and the copy will be cancelled.

2.10 SuccessFactors Employee Central Cloning

2.10.1 Overview

As an additional Add-On, Easy Clone for Employee Central (EC4EC) allows for the copying of Employee Central employees that are linked to a SAP Employee.

Users have an option to copy Employee Central Data that is linked to a SAP Employee. This is available after this additional solution is activated in Easy Clone. The basic way to copy is simply done by clicking the 'Copy Employee Central Data' checkbox

2.10.2 Employee Selection for Employee Central Only Copy

When the **Data in Copy Type** selected is Employee Central Only Copy, these filters will appear in the **Employee Selection** tab.

- Person ID
- Business Unit
- Company
- Division
- Department
- Location
- Position

The Hit List will also show 4 levels of nodes for the filtered employee. The hierarchy will be based on Company > Business Unit > Division > Department.

2.10.3 Overwrite Options for Employee Central Copy

The **Overwrite Options** for existing employees in target systems are available for copying to Employee Central.

The **Overwrite Options** are as follows:

- **No Overwrite** - If this option is not set and the person already exists, they will not be overwritten, resulting in unsuccessful copy for that employee. An error will be logged under the Errored node.
- **Clear All Employee Details** - Selecting this method removes all details for the employee from any tables that could possibly be written to by Easy Clone, even when the table has not been chosen to be copied.

- **Clear Employee Details from tables with data to be copied** - This method will only remove data from the tables that the employee actually has data in (from the tables selected to be copied). This is the default option.
- **Clear Employee Details from all Selected “Data Copy” tables** - Selecting this method removes data for the employee from the tables that have been selected to be copied, regardless of whether the employee has data in that table or not.

For Employee Central Copy, entities will only be deleted if:

- They are defined as deletable from SuccessFactors’ metadata.
- The **Delete prior to copy** checkbox is ticked in the **Entity Group** for that entity.
- Compatibility: The Source and Target systems should have aligned functionality versions for the functionality to work properly.

2.10.4 RFC Connection to SuccessFactors

Each SAP system needs to be connected to a SuccessFactors system. For example: SAP Production is connected to SuccessFactors Production and SAP Test will be connected to SuccessFactors Test environment. The connection is via a RFC connection. This will use an API user that needs to be configured in each system. The password will be built into the setup.

Note: The RFC connection must be a direct connection to SuccessFactors. Currently we do not support using middleware such as *SAP Cloud Integration*.

2.10.5 OAuth SuccessFactors Authentication

There are 2 ways to access OAuth settings:

- Access from the product - In this case, access OAuth settings via Easy Clone. The screen will display Easy Clone OAuth settings for a given company only.
- Access directly - In this case, access OAuth settings via SAP transaction code **SA38** or **SE38** for */ALG/UTILS_MANAGE_OAUTH_SETTNG* program.

For both methods, the screen options are the same. The only difference is the displayed settings:

- If the OAuth settings screen is accessed from Easy Clone, only Easy Clone settings will be displayed.
- If the OAuth settings screen is accessed via the program, all settings will be displayed.

From here, users need to provide values for the following fields:

- Product
- Connection Mode
- Company ID
- Upload API Key
- Upload Private Key
- IDP URL
- Token URL
- RFC containing IDP URL
- RFC containing Token URL
- User ID Mode

- User ID Value
- Test

Note: By default, Easy Clone will use its own OAuth setting from the previous screen. However, users can utilize the **Use fallback OAuth setting** option (*SuccessFactors menu > General Settings*) if only one OAuth is preferred to be shared with the other SpinifexIT products.

2.10.6 SuccessFactors IDP authentication Solution by SpinifexIT

SuccessFactors Identity Provider (IDP) OAuth Deprecation compatibility solutions are delivered through various methods. Customers with an activated connector to SuccessFactors have the following options to help them plan the implementation of the solution.

Note: Customers who have activated connectors to SuccessFactors, whether through Easy Reporter or Easy Clone, need to plan the implementation of a solution before its full deprecation in the year 2025.

- **Web Service Solution**

SpinifexIT developed a Security Assertion Markup Language (SAML) generator to facilitate the deprecation of SuccessFactors IDP.

In terms of application and usage through Easy Clone, the solution is set up in the Manage OAuth Settings screen. This is where users can configure the retrieval of OAuth tokens from SuccessFactors.

These scenarios highlight how customers can leverage web services.

- Updating existing connection to use SpinifexIT Web Services for IDP
- Creating new connection that uses SpinifexIT Web Services for IDP

- **Certificate-Based Implementation**

The certificate-based implementation is a compatibility solution that is applicable to Employee Central Payroll (ECP) customers only under specific conditions.

Note: The beta version is accessible to Partners only.

Enabling the certificate-based connection, through Table Maintenance View (SM30), is a prerequisite for configuring the connection of Easy Clone with SuccessFactors. Once the certificate-based connection is active, configuring the SuccessFactors connection will be through a (selection of) certificate, *mTLS/X.509*.

2.10.7 Link from SAP Employee to SuccessFactors Employee

The Employee in SAP is linked to the SuccessFactors PersonIdExternal using one of the options below:

- Communications Infotype (0105) with selected subtype. It is possible to convert the value on infotype 0105 to lower case to use this value as the PersonIdExternal search (*this is case sensitive*).
- Use SAP employee number as the lookup to Employee Central. This can be searched with or without the leading zeros.
- Use Infotype. This option has the following dropdown fields that are available for input:

- Infotype - This contains the list of available infotypes in the system. The selected value determines the infotype that will be used for the Employee Lookup.
- Subtype - The list of options in this field depends on the selected infotype.
- Field - The list of fields depends on the chosen infotype value. The field selected will be used for the value mapping of external ID linked between On-Premise and Employee Central - SuccessFactors.

2.10.8 Selection to copy Employee Central Data

To copy employee central data, the option **Copy Employee Central Data** needs to be selected on the **4. Data to Copy** tab > **SFSF - Employee Central Data** folder.

In addition to the checkbox, there is the ability to select the SuccessFactors data (*Entities*) that will be copied. These entities fall into two categories:

- Foundation Objects - This will include organisational type information such as Position, Job, Department
- Employee Entities - This will include employee data entities such as Address, Personal Information

For each of these areas, it is possible to select the Configuration Type that contains the setup of what will actually be copied. SpinifexIT by default delivers standard Configuration Types, but it may be necessary to copy these to a customer version, as there may be the need to add entities (*such as custom MDF entities*).

Display buttons are available in the **Foundation Objects and Employees** section of the **SFSF - Employee Central Data** menu. Clicking these buttons displays the active Entity Group, such as the **Standard** and **Custom Entity** group screens.

Users can configure the configuration type by clicking the **Manage Entity Groups** button on this screen.

Furthermore, a simple connection test is available for both the source and target SuccessFactors instances. This test is performed only if the **Copy Employee Central Data** checkbox is ticked, regardless of whether the **Runtime Integration Check** checkbox is selected. During the run, the status bar displays an indicator showing that the connection test is in progress. If an error occurs, the status "*Easy Clone copy was cancelled*" appears.

2.10.8.1 Runtime Integration Check

Integration Check uses the credentials associated with each SuccessFactors instance similar to how actual cloning interacts with the involved instances. That is, any attempt to connect to the other SuccessFactors instance during Integration Check will take place inside the other On-Premise/Employee Central Payroll system instead of the system where the Integration Check was launched.

2.10.9 Manage Entity Groups

The entity groups can be accessed through the Manage Entity Groups functionality in the SFSF - Employee Central Data copy screen.

Through this screen, users can edit an existing Entity Group, Copy to a new Group, Create a new Group or Delete an Existing Group.

When editing a group, users will be able to specify the entities that are to be copied and the order of the copy of the entity.

When editing the entities, the following columns and functionalities are available:

- **Add / Delete Rows**
- **Copy Entity** - Used to select or deselect entities for inclusion or exclusion in the copy by ticking or unticking the checkbox.
- **Copy Order** - Used to assign the order in which entities will be copied.
- **Entity Name** - Used to change entities/entity names.
- **Short Desc**
- **Long Desc**
- **Fields** - Used to change or select fields and navigation fields to be included or excluded in an entity. This will allow users to select to copy only certain fields by ticking the fields to be copied.
- **Navigation Fields** - used to determine the Navigation fields and sub-entities to copy at the same time.
- **Filter** - Used for applying filters to the entities to be included in the copy. This allows users to select the way the SuccessFactors Employee Central records are read, to ensure they read the correct employees data. This is generally pre-delivered, but can be changed especially for customer specific entities.
- **FO Setting (Foundation Object Setting)** - Used to specify Foundation Object links. This keeps track of any foundation objects that are copied and allows these links to be put back when copying this entity.

Easy Clone can automatically detect the relevant objects and their relationships to include them in the copy. The functionality involves traversing and detecting a tree structure to determine if an object is available for copying. This expands the copy scope, reducing the difficulty of aligning Foundation Objects between systems.

As part of the **Foundation Objects Copy Management** functionality, clicking the FO Setting button displays a pop-up screen with the following:

- **Copy prerequisite objects** checkbox - Traverses the prerequisite objects tree and retrieves the related objects. It only selects the objects that are marked for copying in the entity group for Foundation Objects.
- **Prerequisite objects** button - Launches a pop-up screen containing the Prerequisite Objects tree. This window shows the known prerequisite objects for the given fields. The Prerequisite Objects Tree lists all known prerequisites for the entity. Generally, if there are no known prerequisite objects, the tree will not expand, indicating no relationship between the entities.

The existing reference for the **Prerequisite Objects** is stored and maintained under **SuccessFactors > Entity prerequisite object linkages** menu. Accessing this option opens an edit configuration screen where users can modify the entities displayed in the Prerequisite Objects tree. Users have the following options:

- **Add/delete rows**
- **Store to default**
- **Reset to default**
- **Reset to Predelivered**

The changes made in this configuration screen will be reflected in the Prerequisite Objects tree.

- **Batch Setting** - allows users to select to copy only a number of records from this particular entity at the same time, or to always ensure the entity is created by itself.
- **Entity Specific Settings** - used for copying or cloning of existing employees in the target system who have Leave of Absence (LOA) records and allows recurring copy for these employees without being blocked.

Note that this option is activated/applicable for **EmpJob** entities only.

The **Entity Specific Settings** column/button for **EmpJob** will lead users to the checkbox option **Delete existing EmployeeTime LOA records prior to copy**. The **Time Type** (*timeType*) should be provided as part of the filter criteria during the deletion of LOA.

Notes:

- The functionality should be in both the source and target systems.
- **Time Type for Leave of Absence** is different per customer. Users can define their own values for this field. It is important for users to define their own **Time Type** (*timeType*) configuration for the filter.
- For **User ID** and **Approval Status** fields, users can copy the **SF_USERID** and **SF_FLD_INC** filter methods.
- **Delete prior to copy** - provides the option to delete existing records or not when copying SuccessFactors Data.

The **Delete prior to copy** column contains the following dropdown options related to deletion:

 - **Delete**
 - **Do Not Delete**
 - **Partial deletion (filter)**
- **Read Order** - changes the retrieval sequence independently of the Copy Order and clones the EmpWorkPermit and Attachment correctly.
- **Purge Option** - sets the Purge type at Entity level. This provides flexibility in terms of cleaning up the target system before copying, which allows more adaptation to business specific requirements.

The **Purge Option** types are:

- **Full** - deletes all existing records in the target and creates new records based on the records retrieved from the source system.

- **Incremental** - adds new records and updates existing ones in the target system based on the source.

Note: The **Purge Option** for **Employee Time** is set to **Incremental** by default and its dropdown field will be disabled to prevent changes

Default settings are available for each of the mentioned entities above.

Note that these default values are sourced from pre-delivered entity group settings:

- STANDARD_EMPLOYEE (*pre-delivered for copying SFS Foundation Objects*)
- STANDARD_FO (*pre-delivered for copying SFSF Employees*)

No default values will be applied if the entity is not available in the pre-delivered entity group settings.

Additionally, it is possible to copy attachments for additional entities aside from **EmpWorkPermit** - *Employment Work Permits*. Attachments are automatically included when cloning records for the following entities:

- **Personal Information** (*PerPersonal*)
- **Biographical Information** (*PerPerson*)
- **Address** (*PerAddressDEFLT*)
- **Dependents** (*PerPersonRelationship*)
- **National ID** (*PerNationalId*)
- **Job Information and Employment Details for termination action** (*EmpJob*)

2.10.9.1 Deletion for Entities Without a Supported 'Delete' Operation

SuccessFactors employee data can be deleted from entities without a supported '*Delete*' operation (e.g., *PerPersonal*, *PerEmail*, etc.). This functionality will work only if the entities have an '*Operation*' field in the **OData API Dictionary**.

2.10.10 Scramble Employee Central Data

As part of copying Employee Central Data, there is the possibility to Scramble the data to protect the privacy of the employee.

The Scramble rules are used both for scrambling of Personal Information, but also in some cases to know which fields to fill. For example: When do we fill the *UserId*, what method do we use to pick a new *Picklist* value. This is important because we need to at times cater for different configurations from system to system. For example: We may want to force a certain value into a field during the copy because it isn't filled in production.

The following screen allows users to select the scramble rules that will be used, based on the copy. These are broken up into the Foundation Objects scramble rules and the Employees Scramble Rules.

For each of these, there is the possibility to select the options to use, if the user selected to not scramble the data and the rules to use if the data is to be scrambled.

2.10.10.1 Editing Scramble Values

Each of the scramble rule sets can be defined on the **Manage Scramble Sets** screen.

Functionality on the screen includes:

- Ability to open an existing scramble set of rules
- Create a new scramble set of rules
- Copy an existing scramble set of rules to a new set
- Save the changes of a scramble set
- Delete a scramble set

Within the actual scramble set, users can:

- Add a row
- Delete a row
- When editing a row, users have options to:
 - Disable the row - this will ignore the row when determining the scramble settings
 - Select an Entity and Field to apply rules to. The Entities and Fields are pre-read from the metadata from successfactors
 - Set the Sequence order of the scrambles.
 - Set the Scramble Method. This can either be done by selecting the scramble method from a dropdown value, or alternatively there is a wizard which allows users to better supply parameters (See Scramble options available section for more details on the scramble rules)
 - Set the scramble values (See Scramble options available section for more details on the scramble rules/values)
 - Set the conditions that will trigger the scramble rule that will be applied to fields that are blank or null
 - If blank - When this checkbox ticked, the corresponding scramble rule will only be triggered if the field value it applies to is currently blank.
 - If null - When this checkbox ticked, the corresponding scramble rule will only be triggered if the field value it applies to is currently null.

2.10.10.2 Scramble Options Available

The Available scramble options are as follows. Note that it is possible to have more than one scramble rule for a field. They will be applied in the sequence order as dictated by the screen. So, in some cases it is possible to combine these together by using multiple options against the same field.

Generic Scramble Options

These scramble options are used to replace specific fields with new values. They are generally used to ensure that it is not possible to identify the employee in the target system.

Scramble Code	Scramble Code Description	Further Information
CONCAT	<i>(SF) Concatenate original value as <&> with new values</i>	This will take the value already in the field and merge it with the text entered here. The text within the field will replace the <&> value.
DTABAPJAVA	<i>(SF) Convert ABAP Date to SF Atom Format</i>	When dealing with dates, especially those coming from SAP, if the SF field is a date field then it needs to be converted into a format used for SuccessFactors. This command does this.
DATE_PLMNR	<i>(SF) Date plus/minus random days</i>	Use this to scramble a date field by either adding or subtracting a number of days from it.
DEPLINK	<i>Use the generated number for the employee's dependent</i>	This is the Scramble Method used for copying an employee's Dependents information.
FIXED	<i>Use Fixed Value from the Scramble Sensitive Data Table</i>	<p>This will take the value entered into the Scramble value column and use this to lookup a scramble table. For example: Lookup the FIRST_NAME in a table containing various names.</p> <p>The Maintain button is available to allow users to add/modify/delete a set of values for a given Scramble Name.</p> <p>Additionally, users can add more than 999 entries per unique Scramble Name when maintaining scramble settings of entities with FIXED scramble method.</p>
PERNRTABLE	<i>Match value from a SAP table with PERNR (Personnel Number) as key</i>	This will get a value from Employee Central Payroll and put this into the current field. Users will need to specify the Infotype and the technical field name that the data is to come from.
REPLACE	<i>(SF) Replace with specified value</i>	<ul style="list-style-type: none"> - This will take the value entered into the Scramble value column and put it into the field. This might be used to replace an email with a hardcoded value such as dummy@abc.com. - This is also used when assigning a default value for an entity with different key fields in the source and target systems. This is applicable for scenarios where the key fields of the entity between the source and the target systems are not the same.
SUBTY	<i>(SF) Map Entity Field value to SAP INFTY/SUBTY table</i>	This will allow users to get the value from a SAP infotype and subtype. This is especially

		important when trying to match a table with multiple values in SuccessFactors with Multiple Subtypes in SAP. The following options are available for looking up values.
FONEW	<i>(SF) Create new Foundation Object</i>	Use this on a field that references a Foundation Object. When used, a new foundation object will always be created using the given entity. By default it is set to 'Automatic', but users can change it based on custom business rules. This will create the new Position in SuccessFactors according to this Scramble Value.
OTHRENTFLD	<i>(SF) Get from other entity field</i>	Use this to get a value from another entity.
SAMERECFLD	<i>(SF) Same record field</i>	This scramble rule allows for additional checking of the original record so that it can reuse that value. This scramble rule also has the ability to check for navigation fields within the same record.
NATID_NEW	<i>Generate New National ID</i>	This is used for scrambling National IDs and can be attached to the National ID field.

Picklist Scramble Options

The picklist scramble rules are required for Easy clone to know how to handle the movement of picklist values between the systems. The Picklists between two SuccessFactors systems can have some complexities.

- The picklist values codes are often different between systems.
- In some cases, picklist values may be in production but not in test

A functionality is included to handle automatic picklist detection and evaluation. It aims to set a scramble method/value for picklist fields which depends on the picklist version defined between the source and target systems.

The following are the picklist rules available to help migrate the data and randomise it *(If required)*.

Scramble Code	Scramble Code Description	Further Information
PCKMATCH	<i>(SF) Match with corresponding Picklist value</i>	This will look for the corresponding picklist value in the target system and select this before saving the data. If no value is found it will leave this blank
PCKRANDOM	<i>(SF) Use new valid picklist value</i>	This will use a Random selected Picklist value when writing to the new system. Users can use

		this if they want to amortize the data. Please be aware this may conflict then with business rules.
PCKSMART	<i>(SF) Match Picklist. If no match then use random valid value</i>	<p>This will look for the corresponding picklist value in the target system and select this before saving the data. If no value is found it will find a random field and use this.</p> <p>Using the PCKSMART Scramble Method, users can provide Scramble Values (shown below) for Easy Clone to interpret these as optionId or externalCode.</p> <p>Below is a list of the possible input values. It shows the format of the given picklist from the source system and the format of the same picklist from the target system (separated by a dash '-').</p> <ul style="list-style-type: none"> • Input: OPTIONID-OPTIONID Effect: The given value is an optionId and should be converted into optionId. • Input: OPTIONID-EXTERNALCODE Effect: The given value is an optionId and should be converted into externalCode. • Input: EXTERNALCODE-OPTIONID Effect: The given value is an externalCode and should be converted into optionId. • Input: EXTERNALCODE-EXTERNALCODE Effect: The given value is an externalCode and should be converted into externalCode.

Employee Links

As Easy Clone copies the Employee Payroll Employee, it is possible to replace the employee number in SAP into fields. The following options are available.

Scramble Code	Scramble Code Description	Further Information
EMPLINK	<i>(SF) Use the new SAP PERNR</i>	This will take the employee number from SAP and put it into the current field. Any leading zeros will be included if employee number is less than 8 digits long

EMPLINKNZ	<i>(SF) Use the new SAP PERNR w/o the leading zeroes</i>	This will take the employee number from SAP and put it into the current field. Any leading zeros will be removed
SPNEMLINK	<i>(SF) Concatenates 'SPIN_' with the new SAP PERNR</i>	This will take the employee number from SAP and put it into the current field with SPIN_ in front of the field. Any leading zeros will be included if the employee number is less than 8 digits long. This allows for easy identification of copied employees.

System Integrity

Scramble Code	Scramble Code Description	Further Information
NOHR	<i>(SF) Always assign user to NO_HR</i>	When copying an employee and creating the User Entity, the hr field needs to be set to NO_HR if there is no HR Manager during the copy. This setting will do this by default.
NOHRSM T	<i>(SF) Assign user HR to NO_HR if blank</i>	Similar to NOHR but only set to NO_HR if the field is blank in the from system
NOMNGR	<i>(SF) Assign user HR to NO_MANAGER if blank</i>	When copying an employee and creating the User Entity, the manager field needs to be set to NOMNGR if there is no Manager during the copy. This setting will do this by default.
NOMNGRSMT	<i>(SF) Assign user Manager to NO_MANAGER if blank</i>	Similar to NOMNGR but only set to NOMNGRSMT if the field is blank in the from system

For the scrambling methods: **NOHRSM T** and **NOMNGRSMT**, the system will check first if the manager exists in the target system, and if the user ID of the HR Manager or Manager is available in the target system. This updates the fields with the following values:

- **NO_HR** and **NO_MANAGER** if the HR/Manager is not available in the system.
- Retain the incoming Person ID of the HR/Manager if they are available in the system. The entity fields updated in the pre-delivered scramble settings are:
 - User entity's Manager fields (assigned to NOHRSM T and NOMNGRSMT scrambling methods)
 - EmpJob entity's managerId field (assigned to NOHRSM T and NOMNGRSMT scrambling methods)
 - EmpJobRelationships' relUserId field (assigned to NOHRSM T and NOMNGRSMT scrambling methods)

If a user has an existing custom scrambling setting and wishes to use this functionality, the user needs to add/update the entity fields mentioned above in the custom copy of their scrambling methods.

Foundation Object Scramble Options

The Foundation object rules allow us to control what to do with the Foundation Objects during the copy process. As often Foundation objects might have been created in production but not be available in dev or test, there may need to be controls over how to handle this. For each of these scramble rules, there is the need to add the specific foundation object we are working with into the scramble Value field. The following are the options:

- BUSU - Business Unit
- COCE - Cost Center
- COMP - Company
- DEPT - Department
- DIVI - Division
- JBCD - Job Code*
- LOCN - Location
- POSI - Position*

Note: The items Job Code and Position are generally copied and scrambled in the Foundation Object area.

The following describes the scramble rules:

Scramble Code	Scramble Code Description	Further Information
FOLNK	<i>(SF) Align with new Foundation Object</i>	This will fill the field with the new Foundation object code (<i>see the next 2 scramble rules</i>). Essentially, the following 2 rules will create/update the Foundation Objects, and this one will link them to the employee records.
FONEW	<i>(SF) Create new Foundation Object</i>	This will create a new foundation object during the copy. Users should use this if creating new copies of the same employee and they wish to replicate the Foundation Objects.. This is necessary especially if objects such as Position can have only one holder.
FOSMT	<i>Match Foundation Object otherwise create new</i>	This will check to see if the Foundation Object is already in the test environment. If it is then it will use the same object code, but if not, it will identify a new code and use this.
FOSMTSAME	<i>Match Foundation Object otherwise create new</i>	Always copy to the same Foundation Object code. Do not create a new one

Advanced Scramble Options

Clicking the **Configure** button within **Advance Scramble Setting** displays the **Custom User Exit** screen with the following options available:

- **Country**
- **Scramble Value**
- **Function Module**
- **Mapping Group**
- **Map values** button
- **Parameters**
 - **Disable**
 - **Parameter Type**
 - **Parameter Name**
 - **Parameter Description**
 - **Reference Type**
 - **Reference Value**

Below are the available options for **Function Module** and **Reference Type**:

Function Module

Scramble Code	Scramble Code Description	Further Information
EXIT	<i>(SF) Advanced Scramble Setting</i>	<p>It is possible to add custom User Exits to Easy Clone. This may be required for complex scrambling rules. Below are the function modules in User Exit:</p> <ul style="list-style-type: none"> - CONCAT (Concatenate prefix, field and suffix) - This option concatenates values together. - REPLACE (Replace field with supplied value) - This option replaces the field with supplied value. - IF_MAP (If Map) - This function module checks the source system's field value. If there is a match, the source system's field value will be replaced with the value that the user specified to replace it within the target system. - RND_DATE (Get random date) - Users can directly set date fields through this function module and the value will be converted into SuccessFactors-readable format.

		<ul style="list-style-type: none"> - RND_PICKLIST (Get random value from a picklist) - In this function module, Users can specify the picklist where Easy Clone will randomly select an active value (e.g. Country picklist) - CONCAT_SAME_REC (Concatenate fields from the same record) - Concatenate fields from the same record. It can be used to combine the first name and last name into one field and generate an email address using the name fields - GET_DUMMY_FILE (Get Dummy File) - This Advanced Scramble Setting replaces the attachment file with a corresponding dummy file of the same extension. - UPD_ATTA_ID (Update Attachment ID) - This Advanced Scramble Setting updates the attachment ID in the EmpWorkPermit record. - RANDOM_ALPHNUM (Random Alphanumeric Scrambling) - This can be used if users want the value to be a random set of letters, set of numbers or a combination of both in the target field for scrambling. - RANDOM_NATIO_ID (Random National ID with duplicate check (PerNationalID Entity)) - This is a generic function for scrambling the National ID field for countries that do not have any special check with the value other than its uniqueness in the target SuccessFactors system. - RANDOM__NATID_CAN (Random Canada SI number generator (PerNationalID Entity)) - This is a Canada-specific function for scrambling Social Insurance numbers. The function will generate a valid random number which also validates the uniqueness of the value in the target SuccessFactors system.
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		<ul style="list-style-type: none"> - CONV_PICKLIST (Convert field picklist value) - Easy Clone automatically converts the field picklist value between optionId and externalCode only. If labels are needed instead of those two, the scramble exit, CONV_PICKLIST, can be applied to the field to convert its picklist optionId or externalCode into the corresponding label. - DELIM_INFITY_DATE (Delimit Infotype Date) - This can be used to delimit an infotype date. Additionally, it can optionally adjust the sequence numbers if needed. The exit only needs to be applied to the date field of the infotype, and it will automatically handle sequence number adjustments. <ul style="list-style-type: none"> - <i>Note:</i> The specified date should be set in the Other Period option in 4. Data to Copy > Data Period sub tab to avoid blank End Date in the Overview Actions screen. - INFITY_SUBTY_INC (Increment infotype subtype sequence number) - This function adjusts the sequence number of records, primarily to prevent duplicate sequence numbers that may arise when records are delimited to a specific date. This is already called by the DELIM_INFITY_DATE exit when the user sets the I_ADJUST_SEQNR parameter (from DELIM_INFITY_DATE) to X to adjust the sequence numbers. <ul style="list-style-type: none"> - <i>Note:</i> This can only be applied correctly to the CH_SEQNR field. - IF_LOG_EXP (Replace field with supplied value using simple IF condition) - This function modifies record values based on a specified condition, It checks whether the current field value is earlier than the given criteria before replacing it with a new value. - IF_OTHER_FLD (Evaluate other field then replace current field) - This function is used to evaluate another field before replacing the value in the current field.
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		<ul style="list-style-type: none"> - MAP_TABLE (Map current values) - This function is used to map the current field values to their corresponding values from the Mapping Group. - MAP_OTHER_FIELD (Map other field into current field) - This function is used to map the current field values to their corresponding values from the Mapping Group. - IF_OTHFLD_MPCUR (Evaluate other field then map current field) - This function is used to evaluate another field first. If the evaluation passes, it then applies mapping to the current field. - IF_OTHFLD_MPOTH (Evaluate other field then map other field to current field) - This exit is used to evaluate another field first. If the evaluation passes, it maps that field to replace the current field. - RANDOM_NATID (User Exit - National ID) - This user exit supports additional Countries and Card types by scrambling national ID fields to generate valid random national IDs.
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Reference Type

When configuring user exits, there are possible reference types to choose from:

Reference Type Code	Reference Type Description	Further Information
CURRENTFLD	<i>Current Field where the User Exit applies to</i>	This refers to the current field the scramble rule is being applied to.
MANUAL (User supplied input)	NA	This refers to a value being supplied via Reference Value .
TECHFLD	<i>Technical Field in the program</i>	This refers to other variables available within the scope of Easy Clone. This is a bit of advanced configuration that requires knowledge of ABAP. As such use of this Reference Type

		should be complemented from the customer's ABAP development team or from SpinifexIT's consultation/advice.
Current record	NA	This option passes the current record to the parameter.

2.10.10.3 Default Scrambling Options delivered

The following describes the default scramble rules that are delivered. These can be altered to suit individual organisational needs however.

During copy all entities will match UserID/PersonIdExternal to SAP Employee Link

During copy all entities with Picklists will be set to use a scramble method that matches the same value in the target system using the Description or External Code. If a match is not found, this will use a Random Picklist value.

Employee Job (EmpJob Entity) - Blank out the timeRecordingProfileCode and timeRecordingAdmissibilityCode.

Employee Address (Address Entity) - (Home and Mailing) - Randomise the fields address1, address2, city, country, zipCode

Email (perEmail Entity)

Email Address is replaced with text EMAIL@DOMAIN.COM

Emergency Contacts (perEmergencyContacts Entity)

Email address is replaced with text EMEREMAIL

Personal Information (PerPerson Entity)

Date of Birth is replaced with scrambled Date of birth from SAP infotype 0002

Initials, BirthName, preferred Name - Replaced with BLANK

Lastname, Firstname are replaced with scrambled Name from SAP infotype 0002

Phone Information (PerPhone Entity)

PhoneNumber is replaced with 1234567

Photo (Photo Entity)

Photo is blanked out

User (User Entity)

BusinessPhone is replaced with 1234567

DateOfBirth is replaced with SAP infotype 0002 Date of Birth

Email is replaced with EMAIL@DOMAIN.COM

2.10.11 Country-based Scrambling

Easy Clone can be set up to determine country-based scrambling rules by using the **Country** field in the Scramble Settings screen. Country is determined based on the country of the company field from the EmpJob entity of the employee.

Note: The functionality should be deployed in both target and source systems for this to work properly. Currently, this scrambling functionality is only applicable to Employee Entities copy and does not include Foundation Objects copy due to complexity.

When setting a country-based scrambling rule for an entity field, the **Sequence** field should be the same for the other country(ies). The program uses the sequence number in this case to group the entity fields that have been configured with different scrambling settings at country level.

2.10.12 Manager Cycle Detection - Solution Description

Due to circular reporting structures (e.g., *User A reports to B, B to C, and C to A*), there are instances where a user will encounter the message “*Manager Cycle detected with this manager ID*” in SuccessFactors.

The solution description “*Inspect the manager relationships in SF. For more information, check SAP KBA 2344769.*” will also appear together with the message above. This message advises users to review existing user-manager relationships and provides a reference to SAP KBA 2344769 for resolution steps.

2.10.13 Audit Logs for Employee Central Clones

The standard Easy Clone Audit logs are updated for the Easy Clone copy. However, there are some additional features of the Easy Clone for Employee Central Copy.

There are counters for the Employees and Records that were processed for each entity. It will also determine how many records contain a warning or error (*red circle*). There are also indicators for records in the table that already exist in the target system (*orange triangle*) and for records that were successfully copied (*green square*).

Entities are also sorted according to the sequence that they are called from Easy Clone.

For each entity there will be a track of the Get (*From the source system*) and the Post (*To the target system*).

Clicking on each of these will display the details of the GET or POST broken up into the following details. All of this can help to analyse any issues of reading or writing data to SuccessFactors.

- Request Header - This will show the details of the send to Successfactors Path, method etc
- Response Header - This will show the technical response from the call.
- Request Payload - This will show the data passed to the POST
- Response Payload - This will show the data returned from a GET or POST

2.10.13.1 Audit Logs Security

There are security elements in place in Easy Clone to protect the contents of the Audit Logs and prevent security issues. These are applied through user roles implementation and streamlined Audit Logs screen.

One way of applying security controls is to limit who can access the Audit Logs. SpinifexIT customers need to update their Easy Clone User Roles through the User Maintenance menu then Define User Roles submenu if they need to see the Easy Clone audit logs.

The User Role settings need to be configured by checking (or unchecking) the following options:

- Ability to view Audit Logs
- Ability to view Advanced Audit Logs for Employee Central

These options give the users the ability to control the level of access to audit logs, including the information within the logs.

2.10.13.2 Consolidated Employee Central Logs

The *Consolidated Employee Central Logs* functionality organises, handles and consolidates numerous logs produced by bulk cloning of Employee Central data.

The consolidation is facilitated by the **Consolidated Report** screen that is accessible via the **Consolidate Employee Central Logs** button, from the ALV Toolbar of the Easy Clone Audit Logs.

Before fully accessing the report screen, users can filter information using **User ID**, **Person ID**, **Entity**, **Status**, and **Audit Sequence No.** fields to refine the information that will be retrieved. Users can also utilise the **Include related Job Splits** option to include related records for that particular copy session that used job splitting.

Below are the key parts of the report:

- **Status (Filter)** - Used to filter the view based on currently available statuses from the displayed logs.
- **Refine Selection** - Used to modify the selection of audit numbers currently displayed.
- **View Full Message** - Used to access the full message as the length of the text displayed in the ALV display may not be sufficient for the complete message.
- **View Request Payload** - Used to reveal the actual record that was sent. For example, if a certain record triggered an error, users can click this button to inspect the original request payload and analyze the values based on the reported error message.
- **View Solution** - This is an option to show possible resolution on records with an Error Status.

2.10.14 Easy Clone for Employee Central Setup

2.10.14.1 SuccessFactors General Settings

Employee Lookup

The SuccessFactors settings allow users to define how to link the SAP ECP system to Employee Central. The Employee Lookup is where they can identify where the Employee Central Person ID is going to be stored in the system. Below are the options for this setting:

- **Use Communications Infotype (IT0105)** - The **Subtype** can be selected to be converted to the lower case.
- **Use SAP Employee Number** - It is possible to determine the leading zeros will be retained for the employee number.
- **Use Infotype** - This option allows users to use another infotype for the Employee Lookup, for example Infotype 0709 - Person ID, as a link between On-Premise and Employee Central - SuccessFactors.

Infotype and **Field** are required fields. **Subtype** will either be required or optional depending on the Infotype value selected. This is because there are infotypes that have no subtypes.

- **Mapping for Lookup Field**
 - **Person ID** button
 - **User ID** button

OAuth Settings

- **Use fallback OAuth settings** - Allows users to use just one OAuth setting that is shared with other SpinifexIT products.

Runtime Integration Check options

- **Retrieve SuccessFactors items directly from SuccessFactors systems** - Reads real time data from SuccessFactors system and also updates the metadata buffer. This may take a longer time to process depending on the user's system data.
- **Use buffer** radio button - This option reads the data from the buffer.

Keeping Metadata up to date

- **Buffer validity days** - Determines how long a buffer can be stored in a system before it needs to be updated again. This setting (*the number of days*) is validated against the last time the buffer was updated. The buffer is evaluated when the **Use Buffer** option is selected from the above **Runtime Integration Check options**.
- **Current buffer timestamp** - This is a date information on when the last Metadata generation was run for the current system.
- **Check metadata timestamp during Easy Clone launch** - This option checks and reminds the user if the current metadata buffer has already aged past the buffer validity days setting. The message will be raised upon loading the Easy Clone transaction.

Picklist Settings

- **Use MDF External Code** - This option is used for switching the picklist field to be used for processing. When ticked, the system will begin using the mdExternalCode (*metadata External*

Code). When unticked, the system will refer to metadata externalCode (*non-unique External Code*).

Note that this picklist setting is applicable to Picklist option version 2 type only, and displays unticked by default.

Scramble Settings

- **Use variant based scramble settings** - Activates the streamlined Scrambling Settings screen for a more structured configuration.

Additionally, if the Use variant based scramble settings checkbox is enabled, the current scramble set will be saved in the variant and will not be affected by system-default variants.

Employee Central Only Copy Settings

- **Customize structure of employee selection (hit list)** - Customizes the structural items displayed in the **Hit List** of Easy Clone for Employee Central Copy. Selecting this option opens another screen where the level of nodes for employee selection can be configured.

The following options are available when maintaining the node levels:

- **Add row** - Adds additional fields for node level settings.
- **Delete row** - Deletes one or more configured node level settings.
- **Store to default** - Saves the current node level configuration as the default settings.
- **Reset to default** - Discards unsaved changes and reloads the saved default settings.
- **Reset to Predelivered** - Discards all node level configurations and reloads the predelivered settings. Below are the predelivered node level settings:
 - 1 - COMPANY
 - 2 - BUSI_UNIT (*Business Unit*)
 - 3 - DIVISION
 - 4 - DEPARTMENT

2.10.14.2 Metadata Generation

The Metadata needs to be read from SuccessFactors and stored within Easy Clone for efficiency purposes. Essentially the Metadata allows Easy Clone to know the entities and fields, settings behind the fields and also to read picklist values.

This can be generated in foreground or background. The Metadata will be read from successFactors directly.

2.10.14.3 Integration Check

In order to assist with setting up of Easy Clone and identifying any potential concerns an Integration check is possible. This will allow for the source system and target system to be checked. The connection details for the system can be read from the RFC or can be entered directly into Easy Clone (*in case the RFC has not been fully set up*). For the compare this will check:

- RFC Connection to each system and validate these are working
- Role Based Permissions to identify if the roles are setup correctly
- Metadata - This will check across both systems and highlight where there are differences in the metadata. Key items that this highlights includes:
 - confirmation that an Entity exists only in one of the 2 systems

- confirmation that for a given entity, some fields may only exist in one system and not in the other
- confirmation about a difference in a field's property such as length, mandatory, visibility, consistency of the picklist name and picklist type
- When an Entity Group is provided, the Integration Check will filter out the entity to process in the Check Metadata function to those entities used in the Entity Group.

There are options on how SuccessFactors metadata should be read and this can be configured in the SuccessFactors General Settings:

- reading real time data from SuccessFactors system and updating the metadata buffer as well, or
- reading the data from the buffer

There are also information and settings for keeping the metadata up to date such as the buffer details and timestamp during Easy Clone launch.

2.10.14.4 Entity Group/Scramble Set Save to File/Transport Feature

Easy Clone for Employee Central provides users the ability to transport, upload and download Scramble Settings and Entity Group Settings. This functionality intends to aid users in maintaining system settings to avoid issues like missing or changed data fields, especially when moving from one system to another (e.g. Development to Testing). In addition, users can utilize the file/transport feature to backup, upload or download their settings anytime. But users still have the option to save the settings into a transport if desired.

For Scramble Settings, the menus below can be accessed through Manage Scramble Sets. For Entity Group Settings, both menus can be accessed through **Manage Entity Groups**.

- **Entity Group/Scramble Set** menu - The Entity Group/Scramble Set menu contains the following options:
 - New - This option is used to create a new entity group/scramble set.
 - Load - This is used to select and retrieve an existing entity group/scramble set.
 - Save - Select this option to save a new entity group/scramble set.
 - Save As - This option is chosen when users want to change the name of the entity group/scramble set or make a duplicate.
 - Delete - This option is for removing entity group/scramble sets.
- **Edit** menu - The Edit menu contains the following options:
 - Download Settings - Users can download Scramble/Entity Group Settings into an Excel file (*in *.xls format*).
 - Upload Settings - Users can upload Scramble/Entity Group Settings from file from an Excel file (*in *.xls format*).
 - Transport Settings - Users can save Scramble/Entity Group Settings to a transport (*for deployment in different systems*)

The downloaded file meant for transportation and backup/safekeeping. For transportation, users can download a file which can be uploaded to another system. There may be instances where users may reset their systems effectively which can potentially remove the settings. Using this functionality, users can secure a backup of their settings that they can reupload once they have their system rebuilt.

2.10.14.5 Employee Central Business Configuration for Picklists

Manage Business Configuration is a menu in Easy Clone that is accessed through **Menu > SuccessFactors**. This is a feature that provides users the ability to implement actions depending on their Employee Central Business Configuration requirements. It leads to a configuration screen that allows users to specify country specific picklists and scramble National ID.

In this screen, the currently active Business Configuration will be displayed. Use this screen to:

- Create a customer default Business Configuration
- Undo ongoing changes by reloading the customer default settings
- Revert to SpinifexIT pre delivered Business Configuration
- Specify picklist overrides per country

The following tabs are available in the Manage Business Configuration screen:

- **Picklist** - Below are the available fields/columns in this tab:
 - **Entity Name** - The name of the entity as it appears in the metadata - not in the Business Configuration UI. For example, the employee's address appears as homeAddress in the Business Configuration UI but is actually the PerAddressDEFLT in the metadata.
 - **Entity Field** - The entity field that has a picklist override.
 - **Reference Field** - The entity field that Easy Clone will check for a matching value. For example, Easy Clone will check the field country inside PerAddressDEFLT and inspect its value.
 - **Reference Value** - This is the value to be inspected from the Reference Field. In this case, Easy Clone will check the country field and determine if its value is AUS. If it does, then this business configuration record will be applied to the processing of the current employee. Note that the Country values here are from SuccessFactors Employee Central.
 - **Picklist Name** - This is the picklist that will be associated in a field should the conditions be met.
- **National ID** - Below are the available fields/columns in this tab:
 - **Country** - Holds the ISO country code (*e.g., AUS for Australia*).
 - **Card type** - Stores the SF identifier used in SuccessFactors (*e.g., TFN for Tax File Number*). Please note that Identifier values may differ from the actual IDs they represent. For example, Austria's National ID is listed as 'Social Insurance Number' in SAP's guide but referred to as 'Social Security Number' elsewhere. To address this, users can enter both values or match the Identifier (SF) as it appears in their SuccessFactors Employee Central instance.
 - **Easy Clone handler** - Defines the Easy Clone handler/reference for a Country ID (*e.g., AUS_TFN for Australia's TFN*). To help identify the correct Easy Clone handler, a search help icon displays a list of supported National IDs. Additionally, a Display Format is available to confirm the correct handler code.

When the source data includes a National ID, users can generate National IDs for the following supported countries:

- Australia

- Austria
- Brazil
- Canada
- Germany
- Spain
- United Kingdom
- Hongkong
- New Zealand
- Portugal
- Saudi Arabia
- Singapore
- United States of America
- South Africa
- Argentina
- Belgium
- China
- Czech Republic
- France
- India
- Ireland
- Italy
- Japan
- South Korea
- Mexico
- Netherlands
- Poland
- Romania
- Russia
- Turkey
- Taiwan

Supported Countries (*Unavailable in SuccessFactors*)

The countries below are supported, but are not yet available for selection in SuccessFactors:

- Israel
- Kenya
- Angola
- Greece

Pre-delivered Random National ID Values

Randomizing national IDs is supported through pre-delivered random national ID values for the following countries and card types.

- United State (USA) - ssn
- Australia (AUS) - TFN
- Turkey (TUR) - TR

These entries are available in the **/ALG/ECSF_XT_NID** - *National ID* table with pre-delivered values, accessible via transaction code SE16.

Note that if users leave the National ID empty, the system will not create a record in the target system.

Users can do the following operations in both tabs:

- **Add row** - Allows the user to provide additional business configuration records.
- **Delete row** - Allows the user to delete one or multiple business configuration records.
- **Store to default** - Takes the current records and stores as the customer's default business configuration. If there is no record to store, Easy Clone will revert to pre delivered business configuration.
- **Reset to to default** - Discards any ongoing changes and reloads the customer's default business configuration
- **Reset to pre delivered** - Discards customer's business configuration and reloads SpinifexIT pre delivered business Configuration

Managing Custom or Random National IDs

Authorized users can also add, delete and maintain custom or random national IDs in the table. However, please note that:

- If authorized users maintain their own random national IDs, the national ID will be based on that list. However, if no IDs are maintained, the national ID will be based on the pre-delivered national IDs in the /ALG/ECSF_XT_NID table.
- Make sure there are enough national IDs available to be used, as errors will occur if the required number of national IDs is not available.

Limitation: This is not backwards-compatible. Cloning between 2 systems requires that this update be applied to participating systems. This is because the previous versions still have no knowledge of the country specific picklist settings for a field and will continue to operate under the previous behavior. As such, cloning between an older version (*without this update*) and this updated version may fail.

2.10.14.6 Security Measures for Copy to Production Activity

Users have the ability to specify which SuccessFactors Employee Central instances the system treats as Production environments. To better control and monitor this activity, Easy Clone includes the following features:

- Maintenance view for controlling SuccessFactors Employee Central instances designated as Production environments.
- Disallowing the copy against the target system that either has the target instance marked as Production or is missing from the configuration.
- Security role to control which users can modify Easy Clone RFC settings.
- Information logged in the SuccessFactors **OData API Audit Log Detail**, including details from the calling system.
- Deleting the Easy Clone logs will produce a separate internal log containing a timestamp on when the log was deleted.

2.10.15 Employee Central (EC) Buffer Settings for Easy Clone

This functionality introduces a way to execute the buffer program in Easy Clone when using the SuccessFactors Only Copy for Employee Central. This functionality improves system performance as records are read and retrieved faster from buffered data when SuccessFactors buffering is switched on, potentially reducing run time.

This development is useful for users who have no access to Easy Reporter and if they only have Easy Clone for Employee Central.

The **EC Buffer Settings** option is available under the **SuccessFactors** menu. This menu item shows a selection screen that contains the following options:

- **Run Buffer Program** - executes a background job that will trigger the Buffer program
- **Update Buffer Switch** - Executing the **Update Buffer Switch** with *On* and *Off* options activates/deactivates the use of Buffer records that are retrieved by the executed buffer program. The current state of the Buffer Switch is determined by the active radio button in the screen.

The buffer switch will only be updated when the **Update Buffer Switch** checkbox is ticked and will take into account the active radio button. It is only intended to be paired with the **Update Buffer Switch** checkbox to show the current status for the Buffer switch and to use it as well as an option to change between On and Off status. This means that once a user updates the Buffer switch (for example, to Switch Off), the Switch Off active radio button is selected the next time the user visits the menu.

Both checkbox options (*Run Buffer Program* and *Update Buffer Switch*) can be executed in one run. This means that it will run the Buffer Program and it will also update the Buffer Switch depending on the radio button selected by the user.

2.10.16 Cloning Dependents in Employee Central

Easy Clone for SuccessFactors Employee Central provides users the ability to copy the information of the dependents of an employee. This includes the option to scramble the data linked to the Dependents information in SuccessFactors Employee Central.

Note: This functionality will only work if the source and target systems are aligned with the version release of Easy Clone.

Below are the different parts and elements of copying Employee Central Data:

- Entity Group for Dependent
 - STANDARD_EMP_DEPENDENT (SpinifexIT Predelivered Entity Group for Employee's Dependent) is the Entity Group used when copying employee's Dependents details. This is read by default by Easy Clone but users have the option of copying it using the same name in case they want to configure their own settings.
- Scramble Settings for Dependents
 - The following Pre Delivered Scramble Settings for Dependents are:
 - EMP_DEP_SCR (Employee's Dependent - Scrambled) - This option is for scrambling Employee's Dependent data.
 - EMP_DEP_UNSCR (Employee's Dependent - Unscrambled) - This is the option for when unscrambling Employee's Dependent data.
 - This is read by default by Easy Clone. Users have the option to copy it but they need to use the same name in case they want to apply their own configurations. Easy Clone will then use them instead of the pre-delivered settings.
- Scramble Method
 - DEPLINK (Use the generated number for the employee's dependent) is the Scramble Method used for copying an employee's Dependents information.

- Audit Log Details
 - There are separate GET and POST Methods for Dependents. These show the number of Dependents (under Employees column) and Records (with error, warning and successful status) that are processed for each entity. These are identified in the entity names in the audit log by the suffix DEP.

2.10.17 User ID or Person ID Based Cloning

Users have the option of *cloning based on User ID or Person ID* and *generating a new SuccessFactors User ID and Person ID*.

2.10.17.1 Generate New User ID

If the user chooses the **Generate New User ID** option in the **Data to Copy** tab of Easy Clone, the functionality will generate a SuccessFactors **User ID** and **Person ID** based on the next available number/ID in the Target SuccessFactors system.

This will trigger the new User ID generation in SuccessFactors regardless if users are copying for the same employee number or new employee number from the **Copy Options** tab.

The new SuccessFactors User ID and Person ID will be different from the new SAP Personnel number.

2.10.17.2 Mapping for Lookup Field - User ID

User ID or **Person ID** -based cloning is facilitated by the **Mapping for Lookup Field** section in the **SuccessFactors General Settings** screen. This will determine if the Lookup field configured is either mapped to **User ID** or **Person ID**.

Selecting **Person ID** will prompt Easy Clone to copy all the employment records of the employee.

Conversely, if the **User ID** is selected, the data that will be copied will just be based on the defined **User ID**. This provides users the option to copy just 1 employment record and allows for selective copying of employment data, especially in terms of multiple employments.

2.10.17.3 Filter Method

If **User ID** configuration is selected, then the **SF_USERID** filter method from the **Entity Group** will be used.

This filter method has been applied to the pre delivered entity group like STANDARD_EMPLOYEE. Users can copy one of the pre delivered entity groups in case they like to copy based on User ID. But users can also update the existing copy if they prefer to do so.

2.10.18 Multiple Employments Copy Support

Easy Clone can differentiate the multiple employment scenarios available within SuccessFactors Employee Central. This enables targeted copying of employment information based on the employment scenario. Furthermore, Easy Clone has the ability to identify User ID as a lookup value. With this functionality, individual employments are no longer bundled together during the cloning process of an employee.

2.10.18.1 Employment Scenarios

The Employment scenarios which are currently supported by Easy Clone for Employee Central are as follows:

- **Contingent employees**

- These employees are temporary workers that are not hired as regular employees.
- A contingent worker can later be rehired as a full-time employee.
- A full-time terminated employee can later be hired as a contingent worker.
- The contingent worker's employment history is assigned under a separate User ID.
 - Therefore, a regular employee that used to be a contingent worker will have its employment records stored under a separate User ID.
 - Similarly, a contingent worker that used to be a full-time employee will have its employment records stored under the new User ID.

Note: An SAP standard limitation has been identified in the import process involving Contingent employees transitioning to full-time status within a single session. When attempting to download and reupload employment data (EmpEmployment) for both Contingent and Regular employment types, an error is encountered: **Before rehiring an employee, users must dissociate existing employment information.**

With this, Easy Clone will only be able to clone the contingent records only once. Subsequent attempts to update the record via SuccessFactors-side import or OData API will be unsuccessful.

- **National/International transfer**

- This scenario applies to employees that move from one legal entity (A) to another (B).
- Rather than changing the **Legal Entity** field value of an employee from A to B, this process involves terminating the employee from the old legal entity (A) and creating a new employment under legal entity (B).
 - This means that a new User ID will be used to separate the 2 employment records.

- **Global Assignment**

- This scenario applies to employees that are temporarily assigned to other organizational units (*company, department, division, etc.*).
- Global Assignment does not terminate the old employment records.
 - The employee is temporarily assigned for a limited period of time and returns to the original employment units upon expiry of the Global Assignment.
 - During Global Assignment, the old employment is set to *dormant status (paused)* until the employee returns.
 - The Global Assignment will be using a separate User ID.

- **Concurrent**

- This scenario applies to employees that have multiple employments.
- Each employment will be using a separate User ID.
- Applies User ID as a lookup value

2.10.18.2 Entity Groups and Scramble Settings Update for Multiple Employments

For Entity Group settings, there is a specific copy order setting that should be considered when configuring settings for existing customer groups. This same copy order setting should also be applied to pre-defined entity group settings, such as *STANDARD_EMPLOYEE*.

2.10.19 Time Management Data Cloning

Easy Clone for Employee Central can clone Time Management Data which are stored in Time Information Records under the Absences and Time Accounts tabs. It includes the following:

- Approved or pending leaves
- Absences under Time Accounts

Note: Here are the assumptions and requirements for the functionality to work as expected:

- Target employee must have a corresponding active time account.
- There is a possible timing issue where the target newly hired/created employee's time accounts are not yet generated by the system. This will cause the copy to fail.
- Backwards compatibility - Changes must be applied on both source and target systems.
- The below information are not yet included in the initial version of the Time Account data cloning. These will be assessed further in upcoming versions.
 - Actual Time Account
 - Time Account Payout
 - Time Account Purchase
 - Data from already closed Time Accounts
 - Accruals