



CTX-Configuration-Store User Guide

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Versions

Document Revisions

The following revisions have been made to this document

Date	Revision	Notes
28/05/2019	1.0	First Release
20/02/2020	1.2	Added guide to export and import configuration data Aligned screenshots with example data
19/05/2021	1.3	Added AD Group filtering functionality and associated steps to add/remove AD Groups
03/11/2021	1.4	Added user actions on Areas, Customer / Environment/Parameter Names and Parameter Values based on AD segregation

Module Versions

The following revisions have been made to this document

Date	Revision	Notes
28/05/2019	1.0	Creation of: <ul style="list-style-type: none">• Config-CGD-Get-DB-Server• Config-CQD-Query-DB• Config-CGP-Get-Parameters• Config-CEV-Encrypt-Value• Config-GCPQ-Generate-Config-Params-Queries• Config-GPVDQ-Generate-Parameter-Value-Delete-Query• Cortex-ConfigStore-Management-UI
20/02/2020	1.2	Creation of: <ul style="list-style-type: none">• Config-CCFT-Convert-File-To-Table• Config-CRID-Replace-ID Update of Cortex-ConfigStore-Management-UI to include export and import functionality
09/11/2021	1.3	AD Segregation for Areas Added for multi department for segregating the configuration store data in a multi department automation deployment environment.

Preface

About this Manual

This document is a user guide for the CTX-Configuration-Store module.

Audience

The audience for this document is those wanting to understand how to use CTX-Configuration-Store module.

Related Material

Document
CTX-Configuration-Store - Deployment Plan.pdf
CTX-Configuration-Store.studiopkg

Abbreviations used in this Document

OCI	Orchestration Communication Interface
DB	Database
AD	Active Directory

Requirements

The CTX-Configuration-Store module requires the following:

- Minimum Cortex v6.5 installed on the Cortex Application Server
- SQL Cortex-Configuration-Store-Install database installed
- PowerShell V5 installed on the Cortex Server
- PowerShell Active directory Module

📖 If you have a previous Cortex Configuration Store (beta version before the GitHub release) please contact Cortex to obtain the migration document and scripts. These will allow you to migrate existing configuration data into this Configuration Store and continue using it as before.

Integration

Integration with Third-Party Systems

For the flows and subtasks to work in the CTX-Configuration-Store module, the Cortex Config Store database and schema needs to exist on the server containing the Cortex databases. Instructions how to set this up are provided in the 'CTX-Configuration-Store – Deployment Plan'.

The tables involved in the Cortex Configuration Store (Figure 1) schema are:

- **Customers** – Table containing the details on the customer
- **Areas** – The area where the parameters are valid for. For example, 'Generic' could apply to all processes, 'SharePoint' would apply to interacting with SharePoint
- **ADGroup** – The currently available AD groups which are assigned to areas (linked via the AreaADGroupsLink table). Multiple areas can be part of a single group, and an area can be assigned only to one AD group. (though the schema allows more than 1 AD group linking per area).
- **AreaADGroupsLink** – Links the ID values for a specific Area and Group from the Areas and ADGroup table respectively.
- **Environments** – The environment the config parameters are valid for. Generally, one of the following:
 - Development
 - Pre-production
 - UAT
 - Production
- **Param_Name** – The name of the config parameters. For example, 'External-DB-Server' is a parameter where the name of a server where other databases are stored.
 - NOTE: The actual value (in the example, the server name) would not be stored here, instead it would be stored in 'Param_Values'.
- **Param_Values** – Holds the parameter values and link to Customers, Areas and Environments
- **DeleteTransactions** – Stores the deleted configuration items and the restore queries.

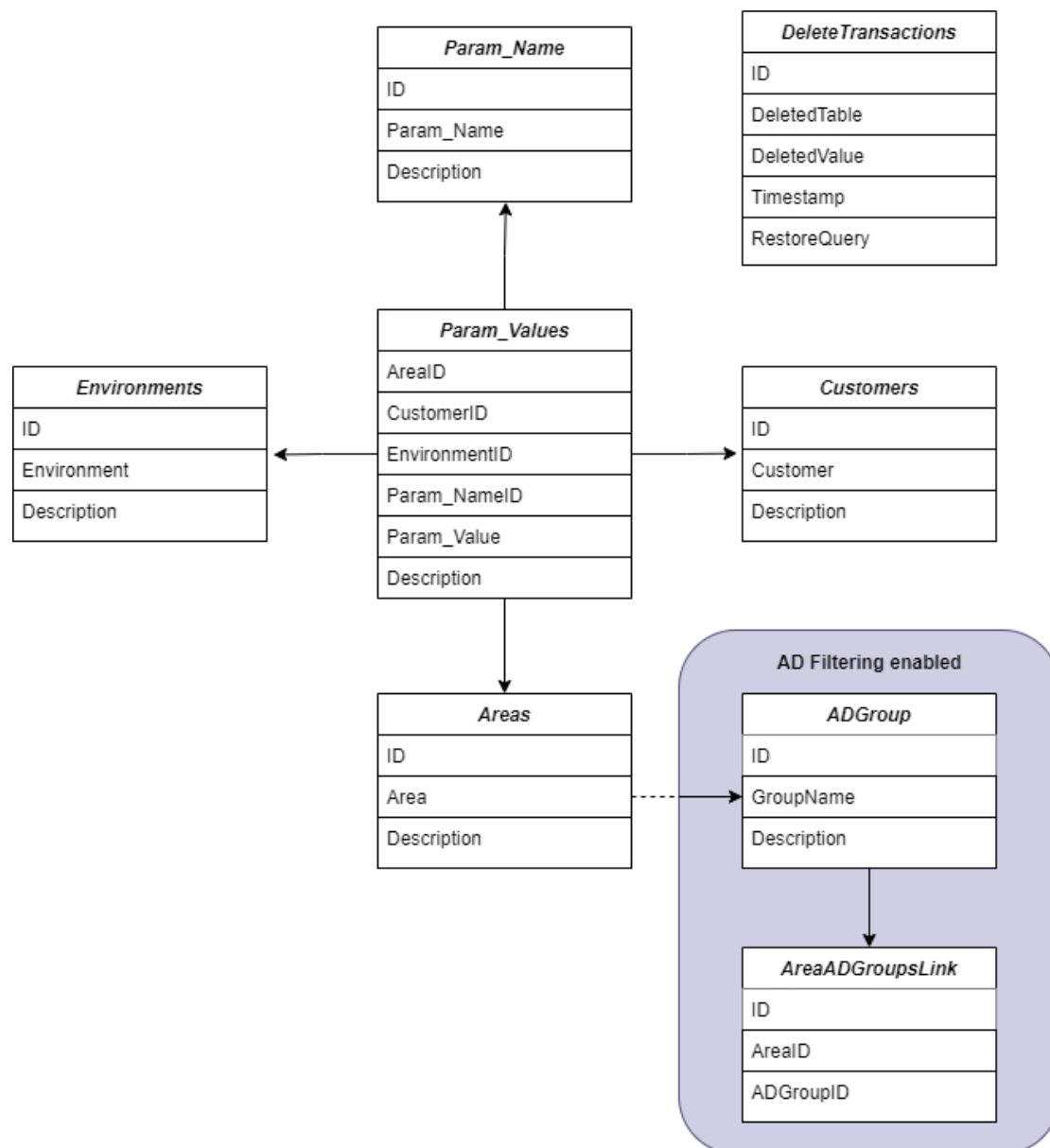


Figure 1: How tables are linked together within the ConfigStore DB. The tables within the grey box are connected if the AD filtering is enabled via the config file being read in at the start of the flow

Integration with Existing Infrastructure

None Required.

1 Configuration Management Overview

'Configuration' is the setting of parameters that customise the behaviour of a Cortex solution. Examples include:

- Database connection strings
- IP Addresses
- Warning thresholds
- Other process specific

The Configuration Management module allows the storage of configuration data on a database and provides all the required subtasks to access and modify it. In addition, it provides a user interface implemented in Cortex LivePortal to manipulate the data.

1.1 Using the Module

Once the .studiopkg file has been imported, navigate to the 'Cortex-Configuration-Management-UI' flow and set the global variable 'G_DB_Name' to an appropriate value. This is the SQL Server Database Name which the Cortex Config store was installed as. By default this value is set to 'Cortex-Configuration-Store'. If the database was deployed with the default name, no update is required.

All functionality is handled using the Cortex Database Interface service user. This user must have the following permissions to the Cortex Config Store Database:

- db_datareader
- db_executor

The Configuration Management module has the below capabilities:

1. Configuration Management, which is achieved using LivePortal. See section 0
2. Using the Configuration, by using the subtask Config-CGP-Get-Parameters to get the configuration based on the Area, Environment and/or Costumer.

AD Group filtering, which shows the user only those Areas which are assigned to the same AD group as the user, or open areas (i.e., Areas assigned to no groups), is enabled by Cortex reading a cs-generic-config.txt file. To disable this, rename the config file located within the Cortex folder which is found by default in C:\Cortex\cs-generic-config.txt

See below the parameters that are configured through cs_generic_config file.

S.No	Parameter Name	Description	Default Value if ts_generic_config.txt is not used
1	PowerShell Parameters PSDomain PSUsername PSPassword	These parameters need to be set if AD control for the module is required. These parameters are like master flags within the flow. If these parameters are not specified then AD control will not be applied.	None
2	AD Parameters ADUserName ADPassword	If AD control is required, a user with AD Read access is required for querying the AD.	None

1.2 User Experience

1.2.1 Cortex-ConfigStore-Management-UI

The 'Cortex-Configuration-Management-UI' is used by the user to create, edit and delete:

- Customers
- Areas
- AD Groups (if functionality is enabled)
- Environments
- Parameters
- Parameter Values

1. When the flow starts, the user is presented with the **homepage**. This page allows the user to view the current configuration and select one of the following options:

- Set Parameter Values
- Manage ...
 - Areas
 - Customers
 - Environments
 - Parameters
 - Parameters Values
- Delete ...
 - Areas (only visible for Advanced version)
 - Customers (only visible for Advanced version)
 - Environments
 - Parameters
 - Parameters Values

Configuration Management

Select what to modify from the following options.
The next UI will allow you to select whether to Add New or Modify Existing.

Set Parameter Values

Manage ...

Delete ...


Show Current Configuration

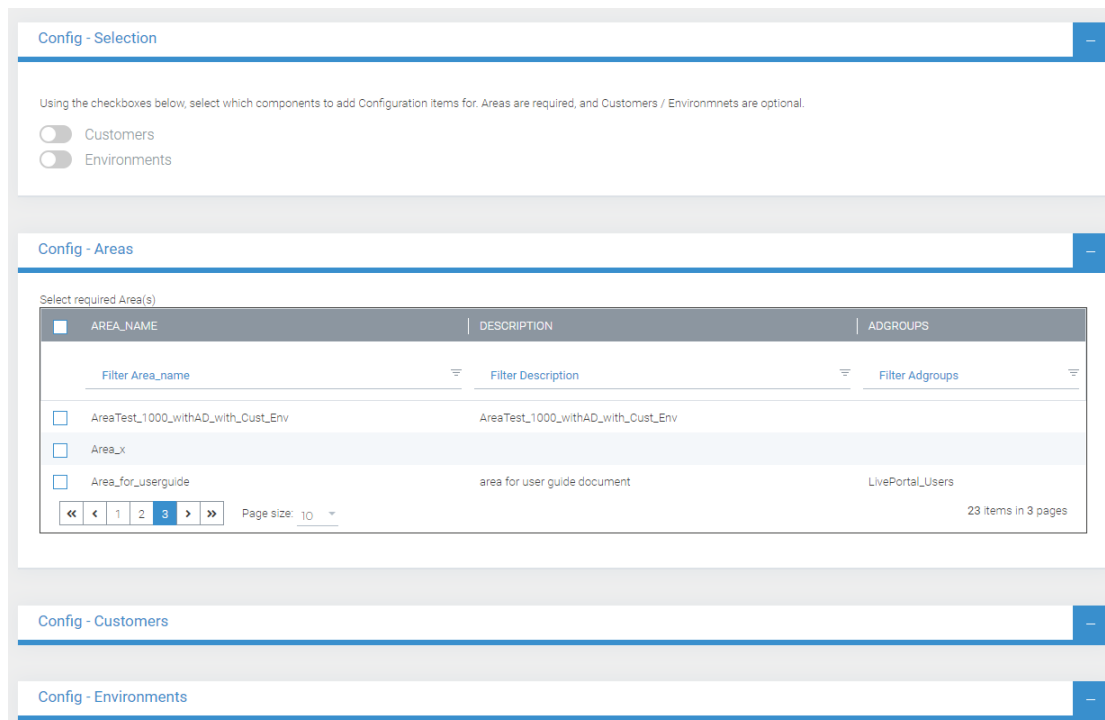
AREA	CUSTOMER	ENVIRONMENT	PARAM_NAME	DESCRIPTION	PARAM_VALUE
Filter Area	Filter Customer	Filter Environment	Filter Param_name	Filter Description	Filter Param_value
Azures	Cortex		AZUsername	5059 test	5059_val
Azures	Cortex	Testing	AZUsername	testuser	test123
Azures	Orange R		AZUsername	Login credentials	testuser
Azures	Orange R	Testing	AZUsername	11	1
Jupiter	Cortex	Testing	AZUsername		1
Jupiter	Orange R		AZUsername	11	11
Jupiter	Orange R	Testing	AZUsername		1
<div><div><<</div><div><</div><div>1</div><div>></div><div>>></div></div> <div>Page size: 10</div>					7 items in 1 pages

1.2.1.1 Add Parameters Values

To add Parameter values there must be a minimum of one Area and one Parameter already in the configuration database. Customers and Environment are optional as configuration can be created and mapped to only an area.

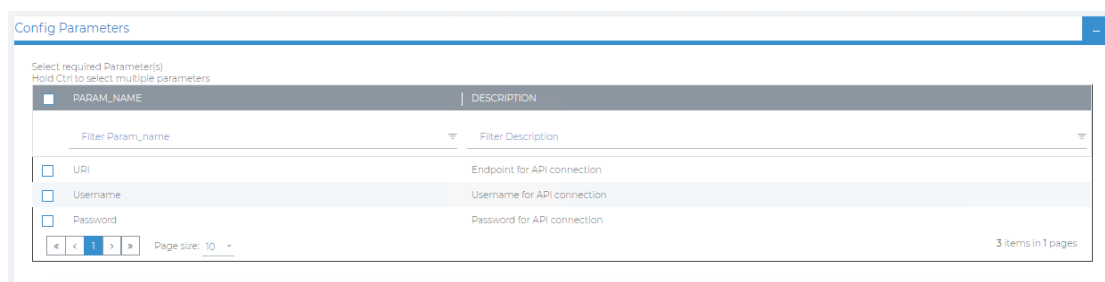
1. When the user selects to Add Parameter Values, a set of panels will be presented so that the user can select which mapping the configuration parameter(s) should have.
 - a. The user must select one or more Areas. The ADGROUPS column will not be shown if AD Group filtering is turned off.
 - b. Optionally the user can select one or more Environments and/or one or more Customers

 Each combination of Area/Environment/Customer will be created to allow a bulk add of parameters



The screenshot shows the 'Config - Selection' panel with two toggle switches: 'Customers' and 'Environments', both currently turned off. Below this is the 'Config - Areas' panel, which contains a table for selecting required areas. The table has columns for 'AREA_NAME', 'DESCRIPTION', and 'ADGROUPS'. The 'AREA_NAME' column includes a search filter 'Filter Area_name'. The table lists three areas: 'AreaTest_1000_withAD_withCust_Env', 'Area_x', and 'Area_for_userguide'. The 'Area_for_userguide' row shows 'LivePortal_Users' in the 'ADGROUPS' column. At the bottom of the table, there are pagination controls showing 'Page size: 10' and '23 items in 3 pages'.

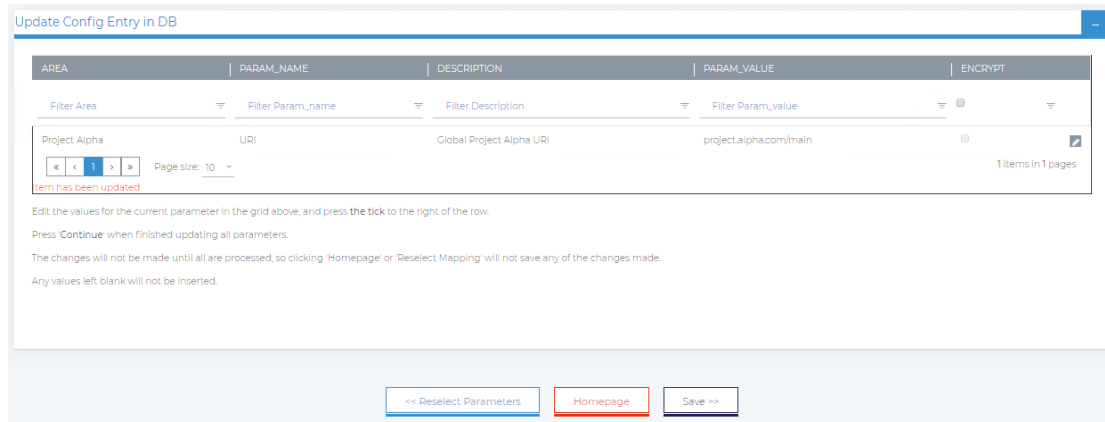
2. After selecting the required Areas, Customers and/or Environments, the user is presented with the Parameters selection screen.



The screenshot shows the 'Config Parameters' panel, which contains a table for selecting required parameters. The table has columns for 'PARAM_NAME' and 'DESCRIPTION'. The 'PARAM_NAME' column includes a search filter 'Filter Param_name'. The table lists three parameters: 'URI', 'Username', and 'Password'. The 'URI' row shows 'Endpoint for API connection' in the 'DESCRIPTION' column. At the bottom of the table, there are pagination controls showing 'Page size: 10' and '3 items in 1 pages'.

- After selecting the required Areas, Customers, Environments and parameters to be configured, the user is presented with the edit screen.

- The screen will display all possible combinations of Area(s)/ Environment(s)/ Customer(s)/ Parameter(s). If one of the mappings already exists, it will be displayed, and the user can either modify or leave it as is (no update will be done)
- It is possible to select specific values to be encrypted before being stored in the database



Update Config Entry in DB

AREA	PARAM_NAME	DESCRIPTION	PARAM_VALUE	ENCRYPT
Project Alpha	URI	Global Project Alpha URI	project.alpha.com/main	<input type="checkbox"/>

Page size: 10

Item has been updated

Edit the values for the current parameter in the grid above, and press the tick to the right of the row.

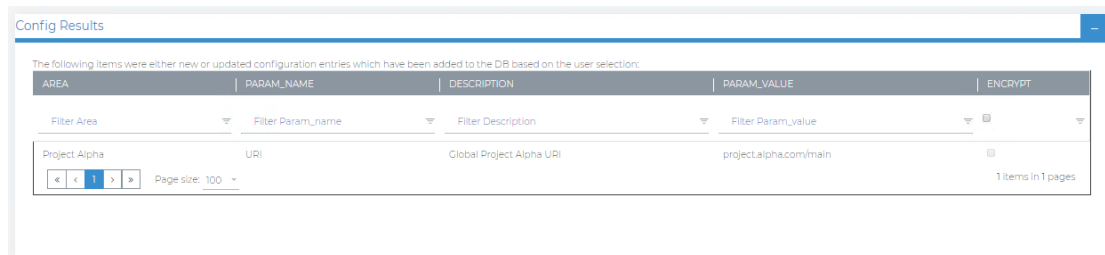
Press 'Continue' when finished updating all parameters.

The changes will not be made until all are processed, so clicking 'Homepage' or 'Reselect Mapping' will not save any of the changes made.

Any values left blank will not be inserted.

<< Reselect Parameters Homepage Save >>

- After clicking Save >> the user will be presented with the results table



Config Results

The following items were either new or updated configuration entries which have been added to the DB based on the user selection:

AREA	PARAM_NAME	DESCRIPTION	PARAM_VALUE	ENCRYPT
Project Alpha	URI	Global Project Alpha URI	project.alpha.com/main	<input type="checkbox"/>

Page size: 100

Item has been updated

Edit the values for the current parameter in the grid above, and press the tick to the right of the row.

Press 'Continue' when finished updating all parameters.

The changes will not be made until all are processed, so clicking 'Homepage' or 'Reselect Mapping' will not save any of the changes made.

Any values left blank will not be inserted.

<< Reselect Parameters Homepage Save >>

1.2.1.2 Manage Functionality (Areas, Environments, Customers, Parameters)

The manage user experience is the same when editing **Areas**, **Customers**, **Environments** or **Parameters**.

- When the user selects to manage the configuration, a table is displayed with the current configuration. 3 options are displayed:
 - Homepage**, this will navigate back
 - Add New**, to add a new configuration item of that type
 - Modify Existing**, to modify the existing configuration items of that type

Configuration Management - Param_Name

PARAM_NAME	DESCRIPTION
URI	Endpoint for API connection
Username	Username for API connection
Password	Password for API connection

Page size: 100

3 items in 1 pages

Homepage Add New Modify Existing

- If the user is managing Areas with AD Filtering enabled, the ADGROUPS column will be displayed, and only areas assigned to either no AD groups, or groups the user is a part of, will be visible.

Configuration Management - Area

AREA	DESCRIPTION	ID	ADGROUPS
Area_for_userguide	area for user guide document	282	LivePortal_Users

Page size: 100

1 items in 1 pages

Homepage Add New Modify Existing

- If the user selects **Add New**, a new screen is presented with two panels. The one of the right side presents the existing configuration items of that type and the one on the left allows the user to add new ones

Add New Area

You have selected to Add to the Configuration Areas.

Click Add new record in the table below to insert the new item value and then click the Tick button to save. You can modify or delete the inserted values by using the row buttons.

Click confirm when finished adding to insert the items to the DB.

- You can only link ONE AD Group to an Area

Add new record

NAME	DESCRIPTION	GROUP
Area_for_userguide	area for user guide document	LivePortal_Users

Item has been added

Page size: 20

1 items in 1 pages

Back Homepage Confirm

View Current Areas

AREA	DESCRIPTION	ADGROUPS
State Engine	State Engine related parameters	

Page size: 20

1 items in 1 pages

- When adding a new Area with AD filtering enabled, the ADGROUPS column will also be shown.

- If the user selects **Modify Existing**, a new screen is presented the existing configuration items of that type and allows the user to edit them

Configuration Management - Modify Param_Name

Modify Param_Names

You have selected to modify the Configuration Param_Name.

The existing data from the DB is shown in the grid below.

Please edit the required items in the grid:

PARAM_NAME	DESCRIPTION	
URI	Endpoint for API connection	<input checked="" type="checkbox"/>
Username	Username for API connection	<input checked="" type="checkbox"/>
Password	Password for API connection	<input checked="" type="checkbox"/>

Page size: 10 3 items in 1 pages

[<< Back](#)
[Homepage](#)
[Confirm >>](#)

1.2.1.3 Manage Functionality (Parameter Values)

- When the user selects to edit **Parameter Values** configuration, a table is displayed with the current parameter values and its linked configuration (Areas, Customers and Environments)

Configuration Management - Modify ParameterValue

Modify ParameterValues

You have selected to modify the Configuration ParameterValue.

The existing data from the DB is shown in the grid below.

Please edit the required items in the grid:

AREA	CUSTOMER	ENVIRONMENT	PARAM_NAME	DESCRIPTION	PARAM_VALUE	ENCRYPT
Project Beta	Tesco	Dev	URI	Tesco URI for Project Beta Dev	tescoBeta1@tesco.com	<input checked="" type="checkbox"/>
Project Alpha	Sainsburys	Dev	Username	Username for Sainsburys Project Alpha Test	sainsburys3oeB	<input checked="" type="checkbox"/>
Project Alpha	Lidl	Dev	Username	Username for Lidl Project Alpha Dev	lidl7aneD	<input checked="" type="checkbox"/>
Project Alpha			URI	Global Project Alpha URI	project.alpha.com/main	<input checked="" type="checkbox"/>

Page size: 10 4 items in 1 pages

[<< Back](#)
[Homepage](#)
[Confirm >>](#)

- The user can edit the required values and commit the changes

 Only rows with changes will be processed. Changes are allowed on the Description, Param_Value and Encrypt column.

1.2.1.4 Delete Functionality

The delete user experience is the same when deleting **Areas**, **Customers**, **Parameters** or **Parameter Values**.

- When the user selects to delete configuration, a double table is displayed with the current configuration of that item on the left side.

- The items the user wishes to delete should be moved to the right side of the table.

Configuration Management - Delete Area

You have selected to delete the Configuration Area.
The existing data from the DB is shown in the grid below.
Please select the items to delete from the below options. Note that this may affect current flows.

AREA	DESCRIPTION
Filter Area	Filter Description
Project Beta	The second project

Page size: 10 1 items in 1 pages

AREA	DESCRIPTION
Project Alpha	The first project

Page size: 10 1 items in 1 pages

[Homepage](#) [Continue >>](#)

- When deleting an item which contains associated configuration, a new page displays all associated configuration which is also going to be deleted. The user can **Confirm >>** to delete both the item(s) selected before and these or **Cancel** the deletion.

Configuration Management - Delete Area - Associated Configuration

The following items are also going to be deleted from PARAM_VALUES table as these are related to the Areas being deleted:

AREA	CUSTOMER	ENVIRONMENT	PARAM_NAME	PARAM_VALUE
Filter Area	Filter Customer	Filter Environment	Filter Param_name	Filter Param_value
Project Alpha			URI	project.alpha.com/main
Project Alpha	Lidl	Dev	Username	lidl@JaneD
Project Alpha	Sainsbury's	Dev	Username	sainsbury's@JoeB

Page size: 10 3 items in 1 pages

Please Confirm or Cancel the deletion of these and the selected Areas.

[Cancel](#) [Confirm >>](#)

- After the deleting is performed a confirmation screen is displayed.

1.2.2 AD Control and Area Segregation

With AD Segregation, Each Area can be linked to one AD group providing segregation of Areas and related parameter value assignments in a multi deployment environment. Once an Area is linked to an AD group, then the Parameter values mapped to that area are only available for the AD group members for viewing / any other UI actions.

Refer to the below subsections for the allowed user actions with AD segregation.

Legend for the below tables:

- **Member Of:** User Membership for an AD group
- **Permission Status:** User Permission status for respective Item (**Area** or **Customer** or **Environment** or **Parameter Name** or **Parameter Value**) UI actions (**Add**, **Modify** and **Delete** actions).
- **All other Columns:** Respective item Action columns.

1.2.2.1 Areas

Add Areas

Member of	Permission Status	Create Area with AD Group and user is part of	Create Area with AD Group and user is not part of	Create Area without AD group
1 AD Group	Full Permissions	Yes	No	Yes
0 AD Group	Implied Full Permissions	N/A	No	Yes

View Areas

Member of	Permission Status	View Areas
1 AD Group	Full Permissions	Yes
0 AD Group	Implied Full Permissions	Yes
1 AD Group and user is not part of	No Permissions	Yes

Modify Areas

Member of	Permission Status	Modify : Add AD Group which user is part of	Modify : Add AD Group which user is not part of	Modify : Remove AD Group which user is part of	Modify : Remove AD Group which user is not part of	Modify: Rename Area
1 AD Group	Full Permissions	Yes	No	Yes	No	Yes
0 AD Group	Implied Full Permissions	N/A	N/A	N/A	N/A	Yes
1 AD Group and user is not part of	No Permissions	Yes	No	Yes	No	No

Delete Areas

Member of	Permission Status	Delete : Area without any Parameter values	Delete : Area with Parameter values
1 AD Group	Full Permissions	Yes	Yes
0 AD Group	Implied Full Permissions	Yes	Yes
1 AD Group and user is not part of	No Permissions	No	No

1.2.2.2 Customer, Environment and Parameter Names

Member of	Permission Status	Add Item	Modify OR Delete Item: when no parameter values are assigned	Modify Or Delete Item : when parameter values are assigned against Areas
1 AD Group	Full Permissions	Yes	Yes	Yes
0 AD Group	Implied Full Permissions	Yes	Yes	Yes
1 AD Group and user is not part of	No Permissions	Yes	Yes	No

1.2.2.3 Parameter Values

Member of	Permission Status	Add Parameter Values	View Parameter Values	Modify Parameter Values	Delete Parameter Values
1 AD Group	Full Permissions	Yes	Yes	Yes	Yes
0 AD Group	Implied Full Permissions	Yes	Yes	Yes	Yes
1 AD Group and user is not part of	No Permissions	No	No	No	No

Configuration Management Subtasks

1.3 Config-CGD-Get-DB-Server

1.3.1 Overview

The Config-Get-DB-Server subtask returns the server where the Reactor database is located.

1.3.2 Inputs

This subtask has no inputs.

1.3.3 Outputs

Output Variables	Type	Description
CGDS_o_SQL-Server	Text	The name of the server where the Reactor database is located.

1.4 Config-CQD-Query-DB

1.4.1 Overview

The Config-CQD-Query-DB subtask connects to a SQL database with the connection string specified and executes the SQL query specified.

Exceptions will be raised if:

- The connection string is not supplied
- The connection string is not valid
- The query is not supplied
- The query is not valid

1.4.2 Inputs

Input Variables	Type	Description
CQD_i_Connection-String	Text	The connection string to the database. REQUIRED. Example: server=localhost;database=Reactor;trusted_connection=true
CQD_i_Query	Text	The SQL query to run on the database. REQUIRED. Example: SELECT * FROM CFG_Globals
CQD_i_results-as-list-boolean	Text	A True or False text value to control if the output should be given as a list or a table. Default value is False Example: False

1.4.3 Outputs

Output Variables	Type	Description
CQD_o_Results	Table	A table containing the result from the SQL query. Only populated if the input CQD_i_results-as-list-boolean is set to False.
CQD_o_Results-As-List	List	A list containing the result from the SQL query Only populated if the input CQD_i_results-as-list-boolean is set to True.

1.5 Config-CGP-Get-Parameters

1.5.1 Overview

The Config-Get-Parameters returns all parameters assigned to the Area/Customer/Environment combination specified.

Exceptions will be raised if:

- An Area has not been supplied

1.5.2 Inputs

Input Variables	Type	Description
CFP_i_Area	Text	The Area to return the parameters for. REQUIRED Example: Azure
CFP_i_Customer	Text	The Customer to return the parameters for.
CFP_i_Environment	Text	The Environment to return to parameters for.
CFP_i_SQL-Server	Text	The name of the server where the Cortex Config Store database. If not supplied, 'localhost' will be used. Example: localhost
CFP_i_DB-Name	Text	The name of the Cortex Config Store database. If not supplied, 'Cortex-ConfigStore' will be used. Example: Config-Database

1.5.3 Outputs

Output Variables	Type	Description
CFP_o_Retrieved-Config	Structure	Config parameters assigned to the Area/Customer/Environment specified

1.6 Config-CEV-Encrypt-Value

1.6.1 Overview

Encrypts a value using the Cortex Flow API.

1.6.2 Inputs

Input Variables	Type	Description
EV_i_Flow-API-Config-Path	Text	The path where the Cortex Flow API is installed. Default value is "C:\Program Files (x86)\Cortex\Cortex Flow Interface Service\ Example: Azure
EV_i_Value-To-Encrypt	Text	the value to be encrypted. REQUIRED. Example: Cortex

1.6.3 Outputs

Output Variables	Type	Description
EV_o_Encrypted-Value	Text	The encrypted value.

1.7 Config-GCPQ-Generate-Config-Params-Queries

1.7.1 Overview

This subtask is used as part of the configuration data generation. It is run for both environments and customers.

If they are required, the subtask will add to the SELECT query, the INSERT query headers, the JOIN query and the WHERE Clause for the Select query.

1.7.2 Inputs

Input Variables	Type	Description
GCPQ_i_Link	Text	Text value containing either Customer or Environment. REQUIRED Example: Customer

GCPQ_i_Insert-Query-Header	Text	Text value containing the start of the insert query. REQUIRED Example: INSERT INTO Param_Values (AreaID, ParamID)
GCPQ_i_Select-Clauses	Text	Text value containing the start of the select query. REQUIRED Example: SELECT Area
GCPQ_i_Selected-Values	List	List containing the values selected for the specific link. REQUIRED Example: ["Dev","Prod"]
GCPQ_i_Read-Only-Columns	List	List containing the read only columns for the grid being displayed to the user during the addition of new configuration values. REQUIRED Example: ["Area", "PARAM_NAME"]

1.7.3 Outputs

Output Variables	Type	Description
GCPQ_o_INSERT-Query-Header	Text	Text value containing the updated insert query.
GCPQ_o_SELECT-Clauses	Text	Text value containing the updated insert select query.
GCPQ_o_Selection-CSV	Text	Text value containing where clause for the specific link.
GCPQ_o_Read-Only-Columns	List	List containing the updated read only columns for the grid being displayed to the user during the addition of new configuration values.

1.8 Config-GPVDQ-Generate-Parameter-Value-Delete-Query

1.8.1 Overview

This subtask is used as part of the configuration data generation. It is used to generate the delete queries for parameter values.

1.8.2 Inputs

Input Variables	Type	Description
GPVDQ_i_Items-To-Delete	Table	Table of parameter values selected to be deleted. Table requires columns: Id, Area, Customer, Environment, ParamName, Description, ParamValue REQUIRED

1.8.3 Outputs

Output Variables	Type	Description
GPVDQ_o_Delete-Query	Text	Text value containing the delete query.
GPVDQ_o_Delete-Transactions-Query	Text	Text value containing the rollback query to be inserted in the transactions table.

1.9 Config-CCFT-Convert-File-to-Table

1.9.1 Overview

This subtask is used to convert the contents of a file containing configuration data into a table variable in Cortex

1.9.2 Inputs

Input Variables	Type	Description
CCFT_i_Config-Data	Structure	Contents of a file containing configuration data, converted to a structure in Cortex REQUIRED

1.9.3 Outputs

Output Variables	Type	Description
CCFT_o_Display-Table	Text	Table result of processing the configuration data

1.10 Config-CRID-Replace-ID

1.10.1 Overview

This subtask is used when a conflict appears upon importing configuration and a new Area, Customer or Environment is created. It searches in the data to import and re-assigns the relevant Param_Values to the new one.

1.10.2 Inputs

Input Variables	Type	Description
CRID_i_File-Data	Structure	Contents of a configuration data file
CRID_i_ID-To-Find	Integer	Id of the Area, Customer or Environment to search for
CRID_i_ID-To-Replace	Integer	Id to replace CRID_i_ID-To-Find with
CRID_i_Entity-to-Search	Text	Area, Customer or Environment

1.10.3 Outputs

Output Variables	Type	Description
CRID_o_Updated-File-Data	Structure	Updated configuration data

1.11 CSL-GAG-Gather-AD-Groups

1.11.1 Overview

This subtask checks the active directory and returns the user-groups available within it for the current user. The input username can be taken in as domain\username, username@domain or just username as-well.

1.11.2 Inputs

Input Variables	Type	Description
GAG_i_UserToCheck	Text	A local function which returns the ID of the user
GAG_i_ADPassword	Text	The Active Directory password
GAG_i_PSDomain	Text	The PowerShell domain name
GAG_i_PSUsername	Text	The PowerShell username
GAG_i_PSPassword	Text	The PowerShell password
GAG_i_ADUserName	Text	The Active Directory username

1.11.3 Outputs

Output Variables	Type	Description
GAG_o_Groups	List	List of AD Groups within the active directory

1.12 CSL-CAG-Check-AD-Groups

1.12.1 Overview

Takes an input of a Group to check against the currently available groups within the Active Directory.

1.12.2 Inputs

Input Variables	Type	Description
CAG_i_GroupToCheck	Text	A local function which returns the ID of the user
GAG_i_ADPassword	Text	The Active Directory password
GAG_i_PSDomain	Text	The PowerShell domain name
GAG_i_PSUsername	Text	The PowerShell username
GAG_i_PSPassword	Text	The PowerShell password
GAG_i_ADUserName	Text	The Active Directory username

1.12.3 Outputs

Output Variables	Type	Description
CAG_o_GroupsValid	Boolean	True if the input CAG_i_GroupToCheck matches any group within the Active Directory, and false otherwise

2 LivePortal UI Flows

2.1 Cortex-ConfigStore-Management-UI

2.1.1 Overview

The 'Config-Manage-Configuration' flow is used by the user to create, edit and delete:

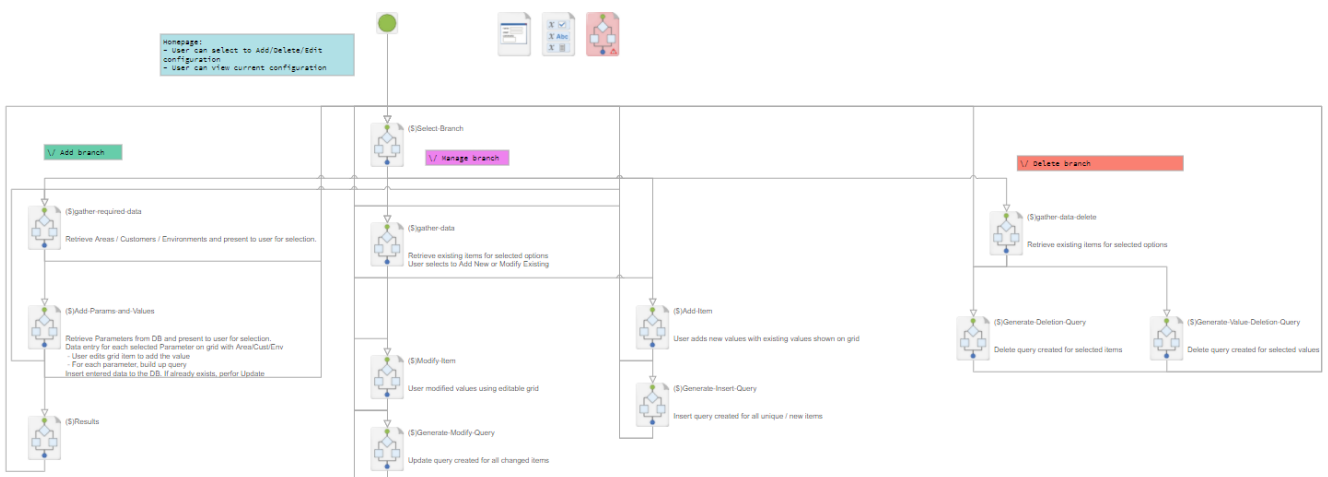
- Customers
- Areas
- AD Groups (if functionality is enabled)
- Environments
- Config_Parameters
- Config_Values

The delete option is used to delete items from the Cortex Config Store. Rows from the following tables can be deleted:

- Customers
- Areas
- AD Groups (if functionality is enabled)
- Environments
- Param_Name
- Param_Values

The sharing option is used to export or import configuration data.

2.1.2 States



- **Generic Branch**

- Select-Branch

Retrieves the database connection string. Checks for AD Group filtering functionality by reading the cs-generic-config.txt file. If found, filtering will be enabled. The files can be re-named to turn off the filtering.

Uses the same SQL server as the Cortex reactor database and the database name specified in g_db-name. The user will be displayed with a grid with the current configuration and a menu bar with the available options.

- **Delete Branch**

- Gather-Data-Delete

The user will be displayed a double grid with all items in the left grid. The user will have to move all items to delete to the right grid and confirm the update.

- Generate-Deletion-Query

A query is generated and executed to delete either Areas, Customers, Environments or Configuration Parameters. Once this is done, the user will be displayed a table containing the data which is now deleted in the database.


- Generate-Value-Deletion-Query

A query is generated and executed to delete either Parameter Values. Once this is done, the user will be displayed a table containing the data which is now deleted in the database

- **Manage Branch**

- Gather-Data

The user will be displayed all information in the table they selected. They will be able to either select the row(s) they would like to update (where they will be taken to the 'Modify Item' state) or add a new row (where they will be taken to the 'Add Item' state).

 **Note:** If the table selected is blank, the user will be instructed they are only able to navigate to the 'Add Item' state

- Modify-Item

The user will be presented a table containing all rows selected in the 'Gather Data' state.

- Generate-Modify-Query

A query is generated and executed to update all rows in the database the user has made modifications to. Once this is done, the user will be displayed a table containing the data from which have been updated in the database.

- Add-Item

The user will be presented a textbox where they are able to input a new item. The user will have to click 'Add', the item will be then displayed in a listbox to the user to the right of the textbox. Once the user has added all the required items to the listbox, the user will have to click 'Confirm' to add all items in the listbox to the database.

- Generate-Insert-Query

A query is generated and executed to insert all rows in the user has created in the 'Add Item' state. Once this is done, the user will be displayed a table containing the data from which have been inserted in the database

- **Add Branch**

- Gather-Required-Data

Returns all Customers, Areas (with associated AD Groups if enabled) and Environments in the database and the user will select which Customer, Area and Environment they are going to assign parameters to.

- Add-Parameters-and-Values

The user selects which parameters to link to the mappings selected in the previous state. Any parameters that are already linked to these will be shown with the current values. The user can either leave the configuration untouched or perform modifications.

- Results

The user is presented a results screen showing the updated/new data.