Table of Contents

[1.Version Control 2](#__RefHeading__48927_1562050551)

[2.Flow Diagrams 3](#__RefHeading__48929_1562050551)

[3.Folder Structure 5](#__RefHeading__48931_1562050551)

[4.Pre-Tasks 6](#__RefHeading__48933_1562050551)

[5.Pruning 6](#__RefHeading__48935_1562050551)

[5.1 Logic for pruning 6](#__RefHeading__48937_1562050551)

[5.2 List of tables to be Pruned using Siebel EIM 7](#__RefHeading__48939_1562050551)

[5.3List of tables to be Pruned using truncate 8](#__RefHeading__48941_1562050551)

[6Masking 8](#__RefHeading__48943_1562050551)

[6.1 Logic for Masking 8](#__RefHeading__48945_1562050551)

[6.2 List of Attributes to be Masked 10](#__RefHeading__48947_1562050551)

[7Post-Tasks 14](#__RefHeading__48949_1562050551)

[8Jenkins 14](#__RefHeading__48951_1562050551)

[8.1 Global Parameters 14](#__RefHeading__48953_1562050551)

[8.2 Global Credentials 15](#__RefHeading__48955_1562050551)

[8.3 Jenkins Job Details 16](#__RefHeading__48957_1562050551)

[DID\_GMS\_45\_POST\_TASKS 72](#__RefHeading__48959_1562050551)

[DID\_GMS\_44\_A2\_PAYMENT\_INSERT\_CHK 154](#__RefHeading__48961_1562050551)

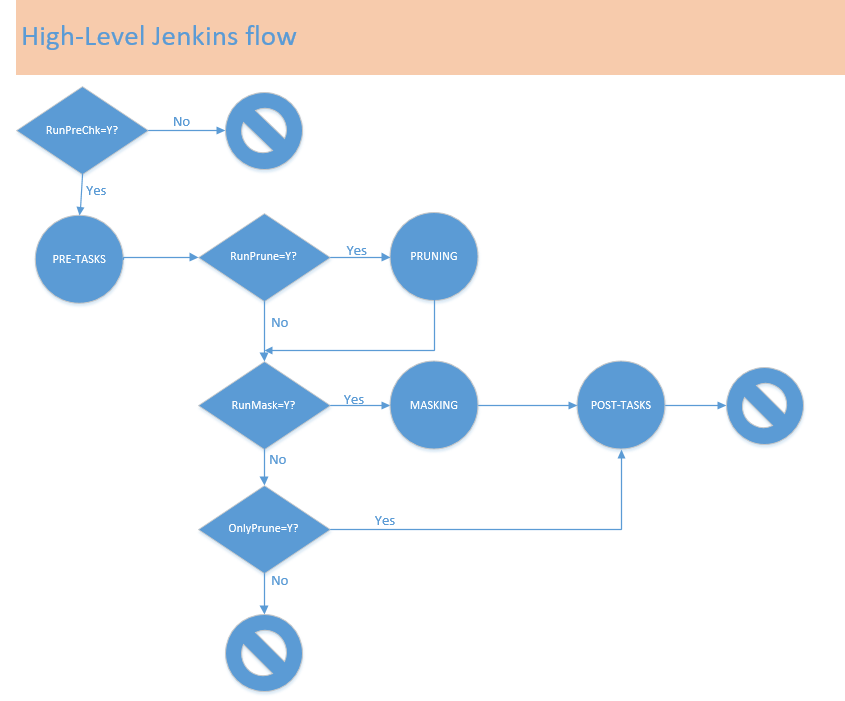
[DID\_GMS\_44\_A\_SRC\_PAYMENT\_DB\_STATS 154](#__RefHeading__48963_1562050551)

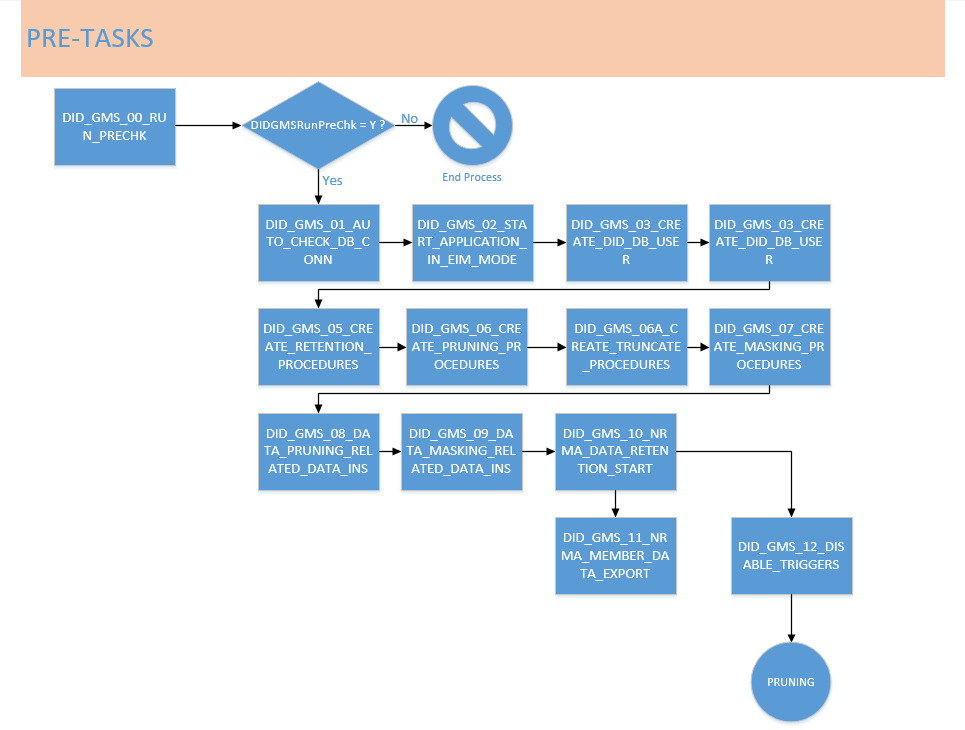
[DID\_GMS\_CONSOLIDATED \_RESULT 154](#__RefHeading__48965_1562050551)

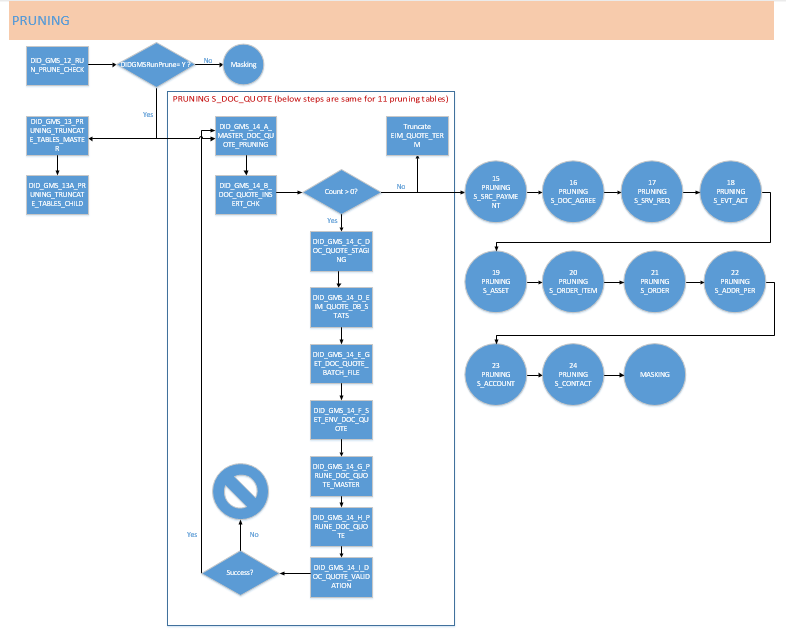
## Version Control

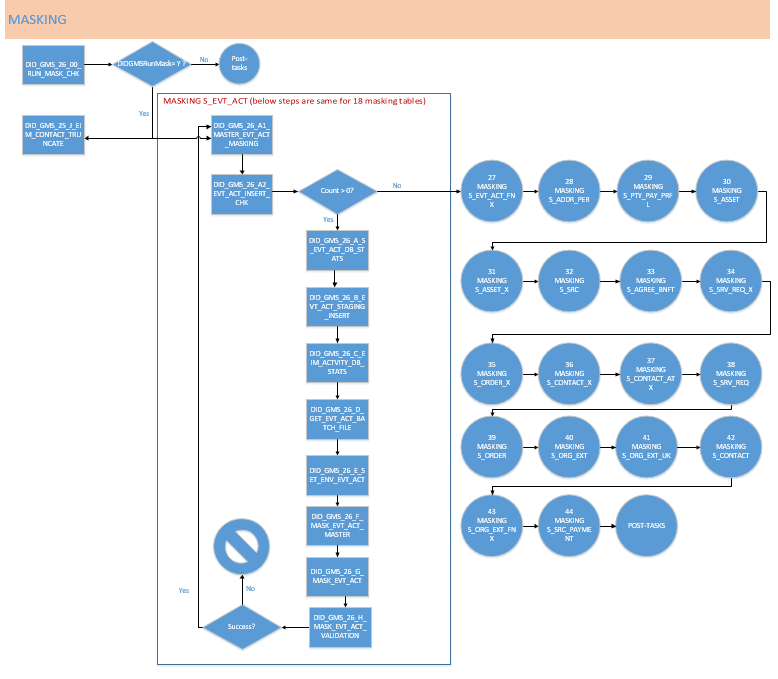
|  |  |  |
| --- | --- | --- |
| Version | Description | Update by |
| 1.0 | First draft | Ranjitha Srinidhi |
|  |  |  |
|  |  |  |

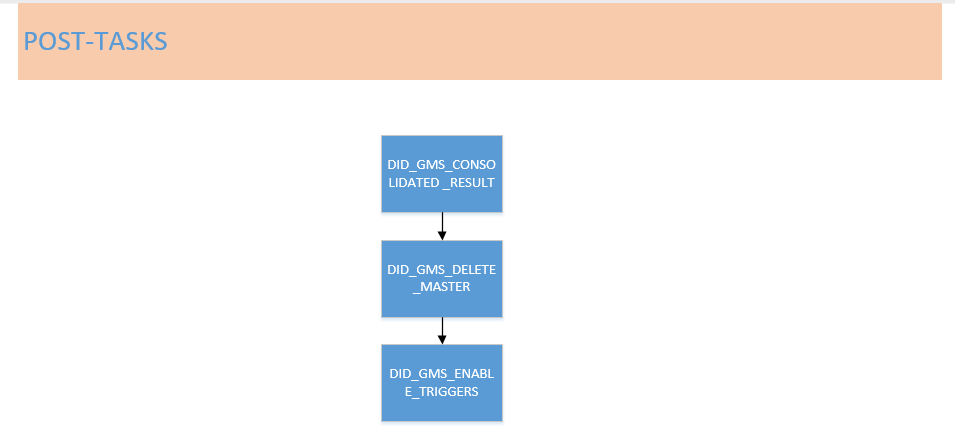
## Flow Diagrams











## Folder Structure

All the code required to Prune and Mask should be placed in the **INNOVACX** folder**.**

|  |  |
| --- | --- |
| Folder Name | Purpose |
| SCRIPTS | All the .sh files are placed OCH Folder in this folder |
| LOG | All the .sh files are placed OCH Folder in this folder |
| DATA | All the .sh files are placed OCH Folder in this folder |
| SQL | All the .sh files are placed OCH Folder in this folder |
| CTL\_FILES | All the .sh files are placed OCH Folder in this folder |

## Pre-Tasks

Jobs for pre-task gets executed only when ‘DID\_OCH\_RunPreChk’ Jenkins global variable is set to ‘Y’.

As a pre-requisite,

* Folders attached in the ‘Operational guide’ should be placed at the appropriate location
* OS level access, DB level access and Jenkins access should be in place as per operational guide
* all the Jenkins global variables and global credentials should be set with the appropriate values (Ref. sections 8.1 & 8.2).

As part of pre-task process,

* DB user, temp tables and procedures for retention, pruning and masking gets created
* If already user/temp table/procedure exists, it will be cleared
* Retention logic will be executed by accepting - Start date, End date and % of retention value for different products (parameterized inputs in Jenkins)
* It will take the file and load into particular table.
* DB triggers will be disabled for better performance

## Pruning

### 5.1 Logic for pruning

Jobs for pruning gets executed only when ‘DID\_OCH\_RunPrune’ – Jenkins global variable is set to ‘Y’.

If this global variable value is set to ‘N’ then masking control job gets executed.

As a pre-requisite, below steps should be completed before executing pruning job –

1. All the Jenkins global variables & global credentials should be set with the appropriate values (Ref. sections 8.1 & 8.2)
2. Retention logic (pre-task) should be executed before pruning
3. For master tables that are getting deleted, number of records per batch should be set in the file ‘OCH\_TABLE\_BATCH\_COUNT.txt’ (path: /backup/INNOVACX/OCH/DATA)

Note: Tables ending with ‘\_P’ represents pruning

1. IFB files should be placed at appropriate path (ref. OCH Operational guide)
2. Update ‘OCH\_MEMBER\_NUMBER.txt’ file to specify member number explicitly to exclude it from pruning

As part of the pruning process,

1. Member numbers (Contacts) inserted in the retention table will be retained
2. System data (User, Employee & Organization) will not be pruned
3. If members are mentioned explicitly in the ‘OCH\_MEMBER\_NUMBER.txt’ file, then it will not be pruned.
4. All the children table data linked to Contact/Member will be retained, rest all will be pruned.
5. Looping logic has been implemented to perform pruning on each table.
6. As per number of records per batch in the ‘OCH\_TABLE\_BATCH\_COUNT.txt’ file and number of batches, records will be inserted, EIM job gets executed and EIM table will be truncated to insert next set of records.
7. DB stats and index creation is done on each table before executing EIM delete process.
8. If Validation script (i/p – passing percentage) fails, process will end.

### 5.2 List of tables to be Pruned using Siebel EIM

|  |  |  |
| --- | --- | --- |
| **TABLE NAME** | **Child Table?** | **DELETE TYPE** |
| S\_CIF\_CON\_MAP | NO | DELETE |
| S\_CIF\_ORG\_MAP | NO | DELETE |
| S\_UCM\_ADDR\_PER | NO | DELETE |
| S\_UCM\_ORG\_EXT | NO | DELETE |
| S\_UCM\_CONTACT | NO | DELETE |
| S\_DQ\_CON\_KEY | NO | DELETE |
| S\_DQ\_ORG\_KEY | NO | DELETE |
| S\_ADDR\_PER | NO | DELETE |
| S\_ORG\_EXT | NO | CASCADE DELETE |
| S\_CONTACT | NO | CASCADE DELETE |

### List of tables to be Pruned using truncate

|  |  |
| --- | --- |
| **TABLE NAME** | **TREATMENT** |
| S\_CIF\_CON\_MAP | Truncate |
| S\_CIF\_ORG\_MAP | Truncate |
| S\_UCM\_ADDR\_PER | Truncate |
| S\_UCM\_ORG\_EXT | Truncate |
| S\_UCM\_CONTACT | Truncate |
| S\_DQ\_CON\_KEY | Truncate |
| S\_DQ\_ORG\_KEY | Truncate |
| S\_ADDR\_PER | Truncate |
| S\_ORG\_EXT | Truncate |
| S\_CONTACT | Truncate |

## Masking

### 6.1 Logic for Masking

Jobs for masking gets executed only when ‘DID\_OCH\_RunMask’ – Jenkins global variable is set to ‘Y’.

If this global variable value is set to ‘N’ then post-tasks gets executed as per condition setup.

As a pre-requisite, below steps should be completed before executing masking job –

1. All the Jenkins global variables & global credentials should be set with the appropriate values (Ref. sections 8.1 & 8.2)
2. For master tables that are getting masked, number of records per batch should be set in the file ‘OCH\_TABLE\_BATCH\_COUNT.txt’ (path: /backup/INNOVACX/OCH/DATA)

Note: Tables ending ‘\_M’ represents masking

1. IFB files should be placed at appropriate path (ref. OCH Operational guide)
2. Masking configuration file ‘OCH\_Data\_Masking\_ConfigurationFile.txt’ (path: /backup/INNOVACX/OCH/DATA) should be updated as per requirement.
3. Update ‘EXTRACT\_MEMBER\_NO.csv’ file to specify member number explicitly to exclude it from pruning

As part of masking process,

1. System data (User, Employee & Organization EXTRACT\_MEMBER\_NO.csv’ file, then it will not be masked.
2. As per number of records per batch in the ‘OCH\_TABLE\_BATCH\_COUNT.txt’ file and number of batches, records will be inserted and EIM job gets executed
3. DB stats is done on each table before executing EIM update process
4. If Validation script (i/p – passing percentage) fails, process will end

#### 6.1.1 Logic for Non-Date Type Columns

Oracle SQL Translate function is used to mask the values.

|  |  |
| --- | --- |
| **Masking Logic** | |
| **Function used** | **TRANSLATE** |
| **V\_STRING\_TO\_REPLACE** | **abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ0123456789** |
| **V\_REPLACEMENT\_STRING** | **zabycxdwevfugthsirjqkplonmZABYCXDWEVFUGTHSIRJQKPLONM2014365897** |

E.g. 1:

Actual Value: NB8

Masked Value: TA9

Eg2:

Actual Value: [abc@gmail.com](mailto:abc@gmail.com)

Masked Value: [zab@dgzeu.bhg](mailto:zab@dgzeu.bhg)

#### 6.1.2 Logic for Date Type Columns:

A global parameter ‘DID\_Masking\_Date\_value’ has been created to store the number of days. A numeric value has to be passed to this parameter. The value is treated as ‘No of Days’ and will be subtracted from the values in the Date columns

Eg 1:

DID\_Masking\_Date\_value = 300

Actual Value: 23-OCT-2018

Masked Value: 27-DEC-2017

Eg 2:

DID\_Masking\_Date\_value = 450

Actual Value: 12-JUN-2018

Masked Value: 19-MAR-2017

### List of Attributes to be Masked

|  |  |  |
| --- | --- | --- |
| **TABLE NAME** | **Columns** | **Masking Logic** |
| S\_CONTACT | FST\_NAME | TRANSLATE(FST\_NAME, V\_STRING\_TO\_REPLACE,V\_REPLACEMENT\_STRING) |
| LAST\_NAME | TRANSLATE(LAST\_NAME,V\_STRING\_TO\_REPLACE,V\_REPLACEMENT\_STRING) |
| BIRTH\_DT | (CON.BIRTH\_DT- <DID\_Masking\_Date\_value>) (Mask date value, will be passed from Jenkins) |
| HOME\_PH\_NUM | TRANSLATE( HOME\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
|  | WORK\_PH\_NUM | TRANSLATE( WORK\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| MID\_NAME | TRANSLATE( MID\_NAME ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| CELL\_PH\_NUM | TRANSLATE( CELL\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| ASST\_PH\_NUM | TRANSLATE( ASST\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| EMAIL\_ADDR | TRANSLATE( EMAIL\_ADDR ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| ALT\_EMAIL\_ADDR | TRANSLATE( ALT\_EMAIL\_ADDR ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| FAX\_PH\_NUM | TRANSLATE(FAX\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| X\_DRV\_LIC\_CLS | TRANSLATE( X\_DRV\_LIC\_CLS ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| CSN | TRANSLATE( MAIN\_EMAIL\_ADDR ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| S\_ORG\_EXT | MAIN\_EMAIL\_ADDR | TRANSLATE( CSN ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| MAIN\_PH\_NUM | TRANSLATE( MAIN\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| NAME | TRANSLATE( NAME ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| X\_LEGAL\_ENTITY\_NAME | TRANSLATE( X\_LEGAL\_ENTITY\_NAME,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| ANS\_SRVC\_PH\_NUM | TRANSLATE( ANS\_SRVC\_PH\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| OU\_NUM | TRANSLATE( OU\_NUM ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| X\_EMAIL\_UNSUBCRIBE\_DT | TRANSLATE( X\_EMAIL\_UNSUBCRIBE\_DT ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| LOC | TRANSLATE( LOC ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| S\_ADDR\_PER | ADDR | TRANSLATE( ADDR,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| ADDR\_LINE\_2 | TRANSLATE(ADDR\_LINE\_2 ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| X\_ADDR\_ROLE | TRANSLATE(X\_ADDR\_ROLE ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
| S\_CONTACT\_ATX | DRIVER\_LICENSE | TRANSLATE(DRIVER\_LICENSE ,V\_STRING\_TO\_REPLACE, V\_REPLACEMENT\_STRING) |
|  |  |

## Post-Tasks

Jenkins post-task job gets executed if pruning or masking or both processes gets executed successfully.

As part of this process,

* Drop user, clear temp tables and procedures will be done
* Enable triggers

## Jenkins

### 8.1 Global Parameters

**Note -** Jenkins Admin can only set these values by navigating to below path:

Jenkins -> Mange Jenkins -> Configure System -> Global properties

|  |  |
| --- | --- |
| **Parameter Name** | **Expected Value** |
| DID\_OCH\_REMOTEKEY | Remote Server Key |
| DID\_OCH\_REMOTEHOST | Remote Server Name |
| DID\_OCH\_ORACLE\_SID | DB Connect string |
| DID\_OCH\_CTL\_PATH | The path of CTL folder |
| DID\_OCH\_DATA\_PATH | The path of DATA folder |
| DID\_OCH\_ENV\_PROF\_PATH | The path of Environment Profile |
| DID\_OCH\_LOG\_PATH | The path of LOG folder |
| DID\_OCH\_ORACLE\_HOME | The path of oracle home |
| DID\_OCH\_SCRIPT\_PATH | The path of SCRIPTS folder |
| DID\_OCH\_SQL\_PATH | The path of SQL folder |
| DID\_Masking\_Date\_value | A numeric value that needs to be used to subtract from DATE type columns as part of masking |
| DIDBatchRangeCount | A numeric value that needs to be used to decide number of batch ranges executed on a single Jenkins node |
| DID\_OCH\_Enterprise | Siebel Enterprise name |
| DID\_OCH\_ServerName | Siebel App Server name |
| DID\_OCH\_Gateway | Siebel Gateway name |
| DID\_OCH\_RunPreChk | Accepted values – Y (or) N  This flag is used to control pre-task execution. If set to ‘Y’, pre-tasks gets executed. |
| DID\_OCH\_RunPrune | Accepted values – Y (or) N  This flag is used to control pre-task execution. If set to ‘Y’, pre-tasks gets executed. |
| DID\_OCH\_RunMask | Accepted values – Y (or) N  This flag is used to control pre-task execution. If set to ‘Y’, pre-tasks gets executed. |
| DID\_OCH\_IfbPath | Folder should be created at <siebsrvr>/admin/<new folder> to place the DID IFB files. The new folder name should be mentioned here. |

### 8.2 Global Credentials

**Note -** Jenkins Admin can only set these values by navigating to below path:

Jenkins -> Credentials -> System -> Global credentials (unrestricted) -> Add Credentials

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kind** | **Scope** | **User Name** | **Password** | **ID** |
| Username with password | Global (Jenkins, nodes, items, all child items, etc.) | NRMADID | NRMADID | DIDDBUser |
| Username with password | Global (Jenkins, nodes, items, all child items, etc.) | <DB Admin> | <DB Admin Password> | DIDDBAdminUser |
| Username with password | Global (Jenkins, nodes, items, all child items, etc.) | <OS User> | <OS User Password> | DIDAdmin |