# CNV-1054 EWM Bin Sorting

| | |
|---|---|
| **Status** | 40% |
| **Owner** | PARA-ext, Anil |
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## Purpose

The purpose of this document outlines the conversion process for Right of Use (ROU) assets Master and Transactional data in SyWay S/4 HANA. The ROU Assets migration will move both the master and transactional data in a single step and there will be only one SAP standard template that will be utilized for both Master and Transactional data migrations. Syniti ADMM tool organises the execution of data extraction, transformation & mapping, loading and data quality (ETL).

ROU Asset master primarily contains of the following information:

- General information: Asset description, asset class, account determination, capitalization date etc.
- Time Dependent data: Cost Center, Plant, Location etc.,
- Depreciation terms data: Depreciation keys, Useful life and Depreciation areas

## Conversion Scope

The scope of this document is to define a data upload approach for active ROU Assets from legacy systems into S/4HANA following the Master Data Design Standard DD-FUN-050 Master Data Standard_1070-Fixed Assets (incl. Sub Assets)

There are 2 group go-live as below:

- Group 1 go-live is planned for 1 July 2028
- Group 2 go-live is planned for 1 Jan 2029

If the currency of the depreciation area in the target S4 system is the same as the currency of the mapped depreciation area in the source system, the ROU asset balances will be copied from the mapped depreciation area of the source system. Otherwise, the asset balances will be converted from the asset balances of the depreciation area of the source system as per the mapping table by using the exchange rates for conversion as below:

- For Group 1 Go live:  B/S spot rate as of 30 June 2028 will be used for Group Depreciation Areas
- For Group 2 Go live:  B/S spot rate as of 31 Dec 2028 will be used for Group Depreciation Areas

Note: If company codes (where local currency is not EUR) have depreciation area in EUR, this EUR depreciation area is currently not used anymore. (In the past, these EUR depreciation areas were used when BFC was not the consolidation tool).

ROU Assets will be migrated to respective group go live as described in Enterprise Structure Catalog - Google Sheets (worksheet 10. Company code).

List of source systems and approximate number of records

| Source | Scope | Source Approx No. of Records | Target System | Target Approx No. of Records |
|---|---|---|---|---|
| PF2 | ROU Assets | 3,270 | S/4 HANA | Will be same as Source, unless any new Assets and/or deactivation of assets before Go-live |
| WP2 | ROU Assets | 1,044 | S/4 HANA | Will be same as Source, unless any new Assets and/or deactivation of assets before Go-live |

## Additional Information

### Multi-language Requirement

It was decided to apply approach below:

- Field “Description Line1” (ANLA-TXT50) = Migrate as it is from legacy system to S/4HANA. The description could be any languages (not only the 4 core languages but also any other non-core languages.
- Field “Description Line2” (ANLA-TXA50) = Migrate as it is from legacy system to S/4HANA. The description line 2 is used to add information on the description of the asset when the line 1 length is not enough.
- Field "Asset main no.text" (ANLH-ANLHTXT) must be in English

### Document Management

N/A

## Legal Requirement

There are no legal requirements relevant to data migration of ROU Assets

## Special Requirements

N/A

# Target Design

The technical design of the target for this conversion approach.

| Table | Field | Data Element | Field Description | Data Type | Length | Requirement |
|---|---|---|---|---|---|---|
| ANLA | BUKRS | BUKRS | Company Code | CHAR | 4 | Mandatory |
| ANLA | ANLN1 | ANLN1 | Main Asset number | CHAR | 12 | System generated number and mandatory |
| ANLA | ANLN2 | ANLN2 | Asset sub-number | CHAR | 4 | System generated number and mandatory |
| ANLA | ANLKL | ANLKL | Asset Class | CHAR | 8 | Mandatory |
| ANLA | ZUJHR | DZUJAHR | Fiscal year in which first acquisition was posted | NUMC | 4 | Optional |
| ANLA | ZUPER | DZUPER | Period in which first acquisition was posted | NUMC | 3 | Optional |
| ANLA | ZUGDT | DZUGDAT | Asset value date of the first posting | DATS | 8 | Optional |
| ANLA | AKTIV | AKTIVD | Asset capitalization date | DATS | 8 | Optional |
| ANLA | DEAKT | DEAKT | Deactivation on | DATS | 8 | Optional |
| ANLA | ORD41 | ORD41 | Evaluation group 1 | CHAR | 4 | Optional |
| ANLA | ORD42 | ORD42 | Evaluation group 2 | CHAR | 4 | Optional |
| ANLA | ORD43 | ORD43 | Evaluation group 3 | CHAR | 4 | Optional |
| ANLA | ORD44 | ORD44 | Evaluation group 4 | CHAR | 4 | Optional |
| ANLA | LIFNR | LIFNR | Account number of vendor (other key word) | CHAR | 10 | Optional |
| ANLA | HERST | HERST | Manufacturer of asset | CHAR | 30 | Conditional |
| ANLA | VMGLI | VMGLI | Property Classification Key | CHAR | 4 | Conditional |
| ANLA | AIBN1 | AIBN1 | Original asset number or Original Group Asset number | CHAR | 12 | Mandatory |
| ANLA | AIBN2 | AIBN2 | Original Sub-Asset | CHAR | 4 | Mandatory |
| ANLA | AIBDT | AIBDT | Original Acquisition Date of AuC/ Transferred Asset | DATS | 8 | Optional |
| ANLA | MENGE | AM_MENGE | Quantity | QUAN | 13 | Optional |
| ANLA | MEINS | MEINS | Base unit of measure | UNIT | 3 | Conditional |
| ANLA | INKEN | INKEN | Include asset in inventory list | CHAR | 1 | Mandatory |
| ANLA | IVDAT | IVDAT_ANLA | Last Inventory on | DATS | 8 | Optional |
| ANLA | INVZU | INVZU_ANLA | Inventory Note | CHAR | 15 | Optional |
| ANLA | INVNR | INVNR_ANLA | Inventory Number | CHAR | 25 | Conditional |
| ANLA | VBUND | RASSC | Company ID of Trading Partner | CHAR | 6 | Conditional |
| ANLA | TXT50 | TXA50_ANLT | Asset description | CHAR | 50 | Mandatory |
| ANLA | TXA50 | TXA50_MORE | Additional asset description | CHAR | 50 | Conditional |
| ANLA | GDLGRP | GDLGRP | Evaluation group 5 | CHAR | 8 | Conditional |
| ANLA | SERNR | AM_SERNR | Serial number | CHAR | 18 | Conditional |
| ANLA | UMWKZ | AM_UMWKZ | Reason for Environmental Investment | CHAR | 5 | Conditional |
| ANLB | AFABE | AFABE_D | Depreciation area | NUMC | 2 | Mandatory |
| ANLB | AFABG | AFABG | Depreciation Start date | DATS | 8 | Optional |

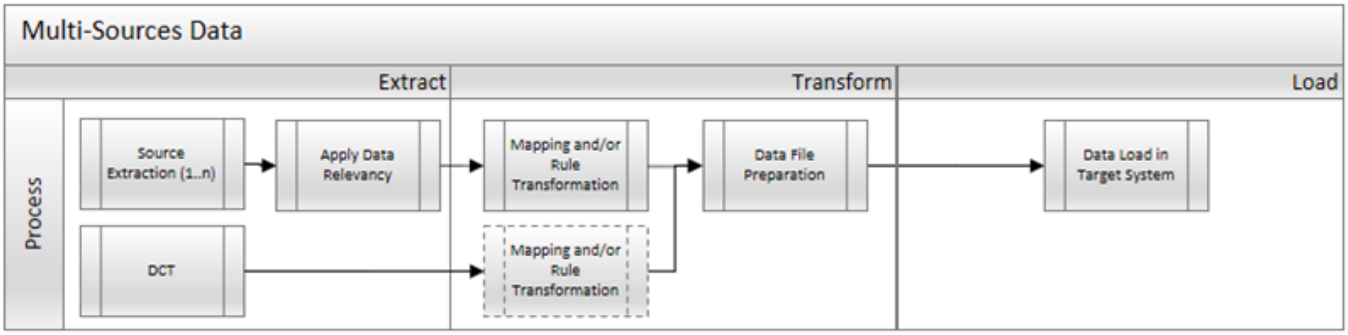
| | | | | | | |
|---|---|---|---|---|---|---|
| ANLB | AFASL | AFASL | Depreciation Key | CHAR | 4 | Mandatory |
| ANLB | NDJAR | NDJAR | Useful Life | NUMC | 3 | Optional |
| ANLB | NDPER | NDPER | Useful Life (Period) | NUMC | 4 | Optional |
| ANLB | SCHRW | SCHRW | Asset scrap value | CURR | 13 with 2 decimals | Conditional |
| ANLB | SCHRW_PROZ | SCHRW_PROZ | Scrap value % | DEC | 14 | Conditional |
| ANLB | ANLGR | ANLGR | Group asset | CHAR | 12 | Not used |
| ANLZ | KOSTL | KOSTL | Cost Centre | CHAR | 10 | Mandatory |
| ANLZ | PRCTR | PRCTR | Profit Centre | CHAR | 10 | System generated |
| ANLZ | WERKS | WERKS_D | Plant | CHAR | 4 | Mandatory |
| ANLZ | STORT | STORT | Location | CHAR | 10 | Optional |
| ANLZ | RAUMN | RAUMNR | Room | CHAR | 8 | Optional |
| ANLZ | KFZKZ | AM_KFZKZ | License Plate No. of Vehicle | CHAR | 15 | Optional |
| ANLH | ANLHTXT | ANLHTXT | Asset main no. text | CHAR | 50 | Mandatory |
| ANLZ | XSTIL | XSTIL | Asset shutdown indicator | CHAR | 1 | Optional |

# Data Cleansing

| ID | Criticality | Error Message/Report Description | Rule | Output | Source System |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

# Conversion Process

The high-level process is represented by the diagram below. Note: DCT is not required for this object 9108. DCT is shown in table below for reference only, just in case in the future data migration, DCT may be required.




The conversion process will be largely automated using Syniti ADMM as the conversion tool:

| Process | Activity |
|---|---|

| | |
|---|---|
| **Extract** | Extract involves collecting data from the source.<br><br>The source is a SAP system, Extract means to pull the required data from source systems into repository using Syniti ADMM. There are 2 steps for this method:<br><br>1. Perform full data extraction from relevant ROU Assets tables in the source system(s).<br>2. Apply Relevancy criteria for filtering the data that will be applicable according to Target Design. |
| **Transform** | There are 2 steps of Transform activities that can happen in ADMM:<br><br>1. Perform mapping and data transformation rules. Some data will need to be mapped to the to-be values and/or updated according to the rules as per design requirement in target system.<br>2. Prepare load-ready data in the structure and format that is required for loading via SAP Data Migration Cockpit or any other standard tool. This step also produces the load data ready for business to perform Pre-load Data Validation. |
| **Load** | This process includes:<br><br>1. Execute the automated data load into target S4HANA system using load tool.<br>2. Once the data is loaded to target system, it will be extracted and prepared for Post Load Data Validation. |

## Data Privacy and Sensitivity

N/A

# Extraction

The ROU Assets shall be extracted from SAP ECC and migrated using the Syniti Migrate. There are 2 possibilities:

1. The data exists. Syniti Migrate connects to the source and loads the data into Syniti Migrate. There are 3 methods:
    a. Perform full data extraction from relevant tables in the source system(s).
    b. Perform extraction through the application layer.
    c. Only if cannot connect to the source, data is loaded to the repository from the provided source system extract/report.
2. The data does not exist (or cannot be converted from its current state). The data is manually collected by the business directly in Syniti Migrate. This is to be conducted using DCT (Data Collection Template) in Syniti Migrate. Note: DCT is not applicable for this object 9108

The agreed Relevancy criteria is applied to the extracted records to identify the records that are applicable for the Target loads

## Extraction Run Sheet

| Req # | Requirement Description | Team Responsible |
|---|---|---|
| 1. | Extract ROU assets from ANLA table in PF2 and WP2 | Syniti team |
| 2. | Apply Asset Relevancy criteria on the extracted records. | Syniti team |
| 3. | Extract Time Dependent Data of ROU asset master records from ANLZ table in PF2 and WP2. | Syniti team |
| 4. | Extract Depreciation Terms Data of the ROU asset master from ANLB table in PF2 and WP2. | Syniti team |
| 5. | Extract ROU Asset master text from ANLH table in PF2 and WP2. | Syniti team |
| 6. | Extract Insurance Data of ROU asset master records from ANLV table in PF2 and WP2. | Syniti team |

# Selection Screen

| Selection Ref Screen | Parameter Name | Selection Type | Requirement | Value to be entered/set |
|---|---|---|---|---|
| N/A | | | | |

# Data Collection Template (DCT)

| Field Name | Field Description | Rule |
|---|---|---|
| N/A | | |

## Extraction Dependencies

| Item # | Step Description | Team Responsible |
|---|---|---|
| 1. | Data cleansing of legacy ROU assets where associated RE-FX contracts are no longer available for valuation. | Business |
| 2. | Data cleansing of legacy ROU assets where ROU assets are still exist though RE-FX contracts are expired, in this instance, ROU assets might require to transfer to normal asset. | Business |

# Transformation

The Target fields are mapped to the applicable Legacy field that will be its source, this is a 3-way activity involving the Business, Functional team and Data team. This identifies the transformation activity required to allow to make the data Target ready:

1. Perform value mapping and data transformation rules.
    a. Legacy values are mapped to the to-be values (this could include a default value)
    b. Values are transformed according to the rules defined in
2. Prepare target-ready data in the structure and format that is required for loading via prescribed Load Tool. This step also produces the load data ready for business to perform Pre-load Data Validation

## Transformation Run Sheet

| Item # | Step Description | Team Responsible |
|---|---|---|
| 1. | Ensure that all of the fields that require value mapping have the latest signed-off and imported into Syniti Migrate. | Data team |
| 2. | Go to Process Area Launch and Process the Object – ROU Asset | Data team |
| 3. | Launch the Objects to execute transformation. | Data team |
| 4. | Perform transformation ROU Assets extracted from PF2 and WP2 where target values will be derived from mapping tables. | Data team |
| 5. | Generate Pre-Load reports in Syniti Migrate. | Data team |
| 6. | Generate data load count in Syniti Migrate. | Data team |
| 7. | Log errors as defects, if any and address resolutions. Close defects. | Data team |
| 8. | Re-transform and re-validate the Pre-load reports if necessary. | Data team |
| 9. | Validate the transformed file as part of pre-load validation, raise data defects or provide the pre-load sign-off. | Business |
| 10. | Analyze and resolve any pre-load defects logged by business. | Data team |

# Transformation Rules

The ROU asset takeover values will be based on the currency of the target depreciation area as depreciation areas are defaulted from the chart of depreciation assigned to the company code in the target system. Thus, depreciation area/chart of depreciation in the target system will be mapped to the depreciation area/chart of depreciation in the legacy system if the currency is the same.

- If the target depreciation area is found in the mapping table, the takeover values will be copied from the source depreciation area.

- Otherwise, will be translated from the gross values found in the Book Depreciation area, refer to section "Depreciation area in Foreign Currency".

Depreciation area in Foreign Currency:

Asset Balances in Group Currency depreciation area will not be migrated as per values Group depreciation areas in the legacy system. If the target depreciation area/chart of depreciation is not found in the mapping table, the corresponding balances for the depreciation area will be derived from the Book Depreciation area i.e. 01-Leading.

For conversion, the exchange rate would be as below:

- For Group 1 Go live:  B/S spot rate as of 30 June 2028 will be used for Group Depreciation Areas
- For Group 2 Go live:  B/S spot rate as of 31 Dec 2028 will be used for Group Depreciation Areas

The translation will be done in ADMM and align to the Trial Balance Conversion.

Translation logic to determine the balance:

In SAP, currencies (data type CURR) are stored with 2 decimal number but can be configured to display with different number of decimals (Table TCURX)

The logic to determine the balance (this logic should apply to all currencies):

1. Check table T093B in legacy system to retrieve the currency for the company code and depreciation area.
2. Check table TCURX in legacy system to find the number of decimal places for the currency. If '0', multiply the amounts by 100, else (including no entry found in TCURX), no action

Currency Adjustment During Migration (TCURX Consideration):

In SAP, the TCURX table defines the number of decimal places used for each currency. This impacts how amounts are stored internally in database tables versus how they are displayed externally in user interfaces or reports.

Currencies such as JPY (Japanese Yen), KRW (Korean Won), or VND (Vietnamese Dong) are typically configured with no decimal places (TCURX-CURRDEC = 0).

Understanding and correctly applying the TCURX rules is essential during data migration to ensure financial consistency between ECC and S/4HANA. Internal vs External Currency Representation example:

**Internal Vs External Currency Amount Representation:**

The amount value as displayed to users in SAP screens and reports is 96015 JPY (external), whereas, the amount value stored in database tables for computation is 960.15 JPY (internal).

During data migration, these internal (technical) amounts must be converted to external amounts to ensure accuracy and consistency in the target S /4HANA system through multiplied by factor = $10^2$ if target has 2 decimals

Conversion Formula: External Amount = Internal Amount * 10 to the power (2 - Number of decimal for the currency in TCURX table)

| Rule # | Source system | Source Table | Source Field | Source Description | Target System | Target Table | Target Field | Target Description | Transformation Logic |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |

## Transformation Mapping

The following legacy values have to be transformed to target SyWay values.

| Mapping Table Name | Mapping Table Description |
|---|---|
| Company code | Mapping of legacy company code to SyWay company code |
| Asset Class | Mapping of legacy ROU asset Class to SyWay ROU asset class |
| Cost center | Mapping of legacy cost centre to SyWay cost centre |
| Profit center | Mapping of legacy profit centre to SyWay profit centre |
| Plant | Mapping of legacy plant code to SyWay plant code |
| Location | Mapping of legacy location to SyWay location |
| Evaluation group 1 | Mapping of legacy EG1 to SyWay EG1 |
| Evaluation group 5 | Mapping of legacy EG5 to SyWay EG5 |
| Depreciation area | Mapping of legacy depreciation areas to SyWay depreciation areas |
| Depreciation key | Mapping of legacy depreciation key to SyWay depreciation key |
| Classification Key | Mapping of legacy Classification Key to SyWay Classification Key |
| Trading Partner | Mapping of legacy Trading Partner to SyWay Trading Partner |

## Transformation Dependencies

List the steps that need to occur before transformation can commence

| Item # | Step Description | Team Responsible |
|---|---|---|
| 1 | Ensure that all of the fields that require value mapping, as specified in section "Mapping tables", have the appropriate values mapped and imported into ADMM. | Data team |

# Pre-Load Validation

## Project Team

### Completeness

| Task | Action |
|---|---|
| **Pre-load reports** | Check that the number of ROU Assets in the upload file are the same as the number of contracts in the ETL file |
| **Pre-load reports** | Reconciliation of record count: Total number of ROU Assets in the extraction is compared against the total number of ROU Assets in the legacy system. |

### Accuracy

| Task | Action |
|---|---|
| **Conversion Accuracy** | R2R Data Team to ensure that all fields listed below pass the checks:<br>1. Mandatory Fields<br>2. Field and Value Mapping Correctness<br>3. Null Checks<br>4. Filed Length Checks<br>5. All necessary config values<br>6. Custom fields if any |
| **Review Error Reports** | Review and correct the errors.  Achieve a zero-error record count as much as possible. Raise defects for data remediated and requiring a correction in the ETL. |

## Business

### Completeness

| Task | Action |
|---|---|
| **Verify record count** | Business Data Owner/s to verify that the total number of relevant records from the source is equal to the total number of records in the Preload and Load Sheets. |

### Accuracy

| Task | Action |
|---|---|
| **Conversion accuracy** | Business Data Owner/s to verify that all ROU assets are transformed accurately as per the ETL rules.<br><br>Review List of Error reports in ADMM for any mismatch or missing transformed values. |

# Load

ROU Assets will be migrated using the SAP tool 'Migration Cockpit' and 'Object: Fixed asset (incl. balances and transactions)'. Migration template is attached as a reference.

? Unknown Attachment

The load process includes:

1. Execute the automated data load into target system using load tool or product the load file if the load must be done manually
2. Once the data is loaded to the target system, it will be extracted and prepared for Post Load Data Validation

## Load Run Sheet

| Item # | Step Description | Team Responsible |
|---|---|---|
| 1 | Ensure Pre-load sign-offs are obtained | R2R Data team |
| 2 | Ensure the load tools are transported into the correct tool instance | R2R Data team |
| 3 | Go to <Load tool> | R2R Data team |
| 4 | Load 1 or 2 records for "ROU Assets" to validate if data is loaded successfully without errors. If errors, log defects and obtain resolution | R2R Data team |
| 5 | Proceed with full load if step 4 is successful and validated | R2R Data team |
| 6 | Validate few records loaded by accessing standard transactions or tables from S/4HNA E.g. AS03, AW01N, AR01 etc., | R2R Data team |
| 7 | Generate post load report if step 6 is validated | R2R Data team |

## Load Phase and Dependencies

The load phase for this object is Pre Cutover and this object will be loaded before RE-FX Contracts (object 9108) is loaded.

### Configuration

The table below shows a key configuration elements

| Item # | Configuration Item |
|---|---|
| 1. | Company Code |
| 2 | Chart of Depreciation |
| 3 | Asset Class |
| 4 | Depreciation Areas |
| 5 | Depreciation Key |
| 6 | GL Account determination |
| 7 | i) Soft Config - ROU Asset number ranges<br>ii) Soft Config - Asset Data Transfer Configuration<br>· Transfer date – Last day of the month prior to go-live<br>· Legacy Data Transfer Status = In Preparation<br>· Document type 9A |

### Conversion Objects

| Object # | Preceding Object Conversion Approach |
|---|---|
| CNV-1073 | Profit Centre |
| CNV-1074 | Cost Centre |

### Error Handling

The table below shows some possible system errors for this data object during data load. All data load error is to be logged as defect and managed within the Defect Management

| Error Type | Error Description | Action Taken |
|---|---|---|
| **Invalid Data** | Relevant cost center is not valid in the validity of time dependent data in the ROU Asset master to be loaded. | Check whether the validity of time dependent data in cost center needs to be changed. |

# Post-Load Validation

## Project Team

The following post load validations will be performed by the project team.

### Completeness

| Task | Action |
|---|---|
| **Reconciliation of Total Record Count** | Total number of records loaded for ROU Assets and Depreciation terms will be generated in the Post-load reports in ADMM.<br><br>ROU Assets in the Post Load report is compared against total number of ROU assets in the pre-load reports by company code, Asset class, cost center, depreciation key etc., |
| **Mandatory fields check** | Review the post load file and note the records that failed the mandatory fields check and fix the errors |
| **Post-load activity** | Recalculate ROU Asset values using t.code AFAR |

### Accuracy

| Task | Action |
|---|---|
| **Check values in key fields for accuracy** | Post-load reports will have the same structure as the load file and some additional columns as required to facilitate the post load validation.<br><br>Leverage the Syniti ADMM tool to create a Post load report that reports S/4 HANA loaded records along with the legacy values side-by-side to allow for 100% check of all these fields in the shortest possible time. If any mismatch, they will report under 'Error' for corrective action. |

## Business

The following post load validations will be performed by the business.

### Completeness

| Task | Action |
|---|---|
| **Record Count Check** | Review the record count report from the Data Team and ensure it is correct by cross-checking with the record count confirmed during Pre-load Business Validations. |

### Accuracy

| Task | Action |
|---|---|
| **Spot checks** | Business should choose some ROU Assets and perform comprehensive checks of the fields in S/4 HANA. Recommended to verify sample data per company code and Asset class combination. |
| **Conversion Accuracy** | Verify that the ROU Assets in target S/4 HANA are loaded correctly via load program and validate post load reports using standard t.code AR01 from S/4 HANA. |
| | |

# Key Assumptions

- Master Data Standard is up to date as on the date of documenting this conversion approach and data load.
- ROU Assets are in scope based on data design and any exception requested by business.
- ROU asset master cleansing is completed.
- All ROU assets (associated with RE-FX contracts) must be deactivated (i.e. populate the deactivation date field).

# See also

# Change log

| Version | Published | Changed By | Comment |
|---|---|---|---|
| **CURRENT (v. 19)** | **Dec 05, 2025 11:44** | **HASSAN-ext, Shamir** | |
| v. 18 | Nov 12, 2025 10:58 | **HASSAN-ext, Shamir** | |
| v. 17 | Oct 02, 2025 18:05 | **HASSAN-ext, Shamir** | |
| v. 16 | Oct 02, 2025 17:31 | **HASSAN-ext, Shamir** | |
| v. 15 | Sept 08, 2025 06:03 | **HASSAN-ext, Shamir** | |
| v. 14 | Sept 05, 2025 06:23 | **HASSAN-ext, Shamir** | |
| v. 13 | Sept 05, 2025 06:21 | **HASSAN-ext, Shamir** | |
| v. 12 | Sept 02, 2025 06:43 | **HASSAN-ext, Shamir** | |
| v. 11 | Aug 27, 2025 19:41 | **HASSAN-ext, Shamir** | |
| v. 10 | Aug 20, 2025 03:36 | **HASSAN-ext, Shamir** | |

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