

**Pentaho Data Integration
Naming Standards**

HITACHI

Inspire the Next

Change log (if you want to use it):

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Overview

This document covers some best practices on Pentaho Data Integration (PDI). In it, you will learn PDI step naming standards and tips about how to choose appropriate steps in certain situations.

Our intended audience is PDI users or anyone with a background in ETL development who is interested in learning PDI development patterns.

The intention of this document is to speak about topics generally; however, these are the specific versions covered here:

| Software | Version(s) |
|----------|------------|
| Pentaho | 7.x, 8.0 |

The [Components Reference](#) in Pentaho Documentation has a complete list of supported software and hardware.

Before You Begin

Before beginning, use the following information to prepare for the procedures described in the main section of the document.

Other Prerequisites

This document assumes that you have knowledge about PDI and that you have already installed Pentaho software.

Use Cases

Use cases employed in this document include the following:

-
- *A company new to PDI needs to set forth naming standards across the team of developers to deliver consistent lines of code which could be managed by any team member and not just the person who did the development.*
-

PDI Organization and Naming Conventions

Consistent and uniform organization, coding, and naming are important in the implementation of PDI, so that everyone using the system can find what they are looking for and understand where the information comes from and what it indicates.

You can find details on these topics in the following sections:

- [Job Naming](#)
- [Transformation Naming](#)
- [Job Entry Naming](#)
- [Transformation Step Naming](#)

Job Naming

A job serves as a wrapper for one or several transformations or jobs, and provides the ability to perform database operations such as truncate, file operations such as file transfer protocol (FTP), and notifications through email. Jobs graphically represent the order in which a table or set of tables should be loaded, and any pre-processing or post-processing that should occur.

To distinguish job names from names of other objects, and to emphasize what the job is intended to accomplish, create your own naming convention to apply to all your job names wherever possible.



For example, if a directory contains more than one type of object, you could try a prefix of `j_` on all job names, and create the rest of the name according to what the job does, like this:

`j_<Purpose/Action>_<Target Identifier>`.

Try using examples such as those in Table 1 for your job names. In Table 1, the first part of the job name, the `<Purpose/Action>`, is the verb of what is being done in the job, such as load, perform, build, move, delete, and so on. This piece of the name lets you know why the job exists.

The second part of the job name, the `<Target Identifier>`, is the name of the main subject of the job, such as `dim_tables` or `fact_tables`. It can also represent the names of other objects such as a database schema (`staging` or `bi` or any other), a file (`flat_file` or something similar), or a single table name (such as `fact_sales`).

Table 1: Example Job Names

| Job Description | Job Name Example |
|--|--|
| Loads all of a database's dimension tables | load_dims |
| Loads all of a database's fact tables | load_facts |
| Handles load processes for a single database table | load_sales_fact |
| Main job in creating a flat file for FTP delivery | build_ftp_transaction_file |
| Validates files by comparing checksum values | compare_checksum |
| Pulls data from one area to another | pull_oltp_to_staging |
| Handles error notification | update_on_error send_error_notification |

There are other alternatives you can consider to shorten job names, such as removing vowels and using `dim_tbls` instead of `dim_tables`.

Transformation Naming

A transformation contains the business rules that the source data must follow as it populates the target destination table(s) or file(s). Transformations, together with jobs, create the executable code that can be called using Kitchen, Pan, or an external scheduling tool. Transformations graphically represent a form of data flow diagram that connects the source table(s) with the target table(s).

One or more transformations may be included within a job. Examples include data warehouse table loads, fact table loads, dimension table loads, and aggregate table calculations.

To name transformations (or mappings, which use the `map_` prefix but otherwise follow these rules):



Use whichever naming standard (uppercase, lowercase) is right for your organization, but be consistent. In our example, we will use lowercase.

- Create transformation names in all lowercase.
- Use this convention for transformation or mapping naming:

```
<Purpose/Action>_<Subject/Target Identifier>
```

```
map_<Purpose/Action>_<Subject/Target Identifier>
```

- Fill in the <Purpose/Action> and <Subject/Target Identifier> parts of the name depending on what the transformation does. For example, if the transformation loads the `dim_equipment` table, try naming the transformation `load_dim_equipment`. If the transformation truncates all the dimension tables, it makes more sense to name the transformation based on that action and subject: `truncate_dim_tables`.

Table 2: Example Transformation Names

| Transformation Description | Transformation Name Example |
|--|--|
| Loads the <code>dim_equipment</code> table | <code>load_dim_equipment</code> |
| Loads the <code>fact_sales</code> table | <code>load_fact_sales</code> |
| Truncates all dimension tables | <code>truncate_dim_tables</code> |
| Sets filename received from previous results as a variable | <code>set_file_name_var</code> |
| Handles inserts to the dimension tables for the Not Applicable or zero record only | <code>initial_insert_na_record</code> |
| Sets variables for a specific database area | <code>set_staging_vars</code> <code>set_dwh_vars</code> |
| Mapping that obtains different metadata properties from a text file | <code>map_file_properties</code> |

As with the job naming, one way to make transformation names shorter is to remove vowels.

Job Entry Naming

A job entry name should reflect the function of the object based on the following criteria:

- An entry based on a target object (like a transformation) should inherit the target's name (like `dim_date_hour`).
- Name an entry based on an action to reflect the purpose of the action (like `delete_closure_records`).
- Always name entries in lowercase letters (or according to the consistent upper/lowercase usage of your organization).

Use the standard prefix for entries, and name them with descriptions of the operations or intent of the entry. The full list of job entry naming conventions is available in [Appendix 1](#).

Table 3: Example Job Entry Names

| Job Entry | Naming Convention | Description/Example |
|---------------------------------|--|---|
| Transformation | Transformation name | This entry should reflect the transformation name, <code>load_dim_equipment</code> . |
| Simple evaluation | <code>se-+ purpose/attribute</code> | If the simple evaluation is being performed on a variable determining whether the run is the initial load, the job entry name should be <code>se-initial_load</code> . |
| Structured Query Language (SQL) | <code>sql-+ action/purpose/filename</code> | If the SQL script contains code to drop indexes on a table, then the name can simply be <code>sql-drop_indexes</code> . You can include the table name as well, but consider the overall job entry name length. |
| Write to log | <code>wtl-+ purpose/job name</code> | If the <code>load_dims</code> job is making note in the log of what parameter/variable values are being used at execution time, the name should be <code>wtl-load_dim_vars</code> . |
| Job | Job name | This should be the same name of the job being called by the job entry step, <code>load_dims</code> . |
| Set variables | <code>svar-+ purpose</code> | If you are setting variables coming from a properties file named <code>staging.properties</code> , then the job entry name should be <code>svar-staging_properties</code> . |

Transformation Step Naming

There are more than 200 different transformation steps available in developing a transformation, and the basic naming convention is a two- to seven-letter abbreviation of the step name followed by a colon and a short description identifying the step's purpose.

A step name should reflect the function of the object based on the following criteria:

- A step based on a source object (like a table or file) should inherit the source's name.
- A step based on a target object should inherit the target's name.
- Always name steps in lowercase letters (or according to the consistent upper/lowercase usage of your organization).

Use the standard prefix for steps, and name them with descriptions of the operations or intent of the entry. The full list of step naming conventions is available in [Appendix 2](#).

Table 4: Example Step Names

| Step Type | Naming Convention | Description/Example |
|-----------------|--|--|
| Add constants | ac-+ attribute/subject name | Name this step as ac-+ the name of the attribute being generated, or, if there are many attributes, a subject area name would be sufficient. |
| Add sequence | aseq-+ attribute name for which the sequence is being generated | If the sequence is being generated for column_product_key, then the step should be named aseq-product_key. |
| Database lookup | dblkp-+ attribute name for which lookup is being performed | If the lookup is being performed on product_key using the table DIM_PRODUCT, then name the step dblkp-product_key. |
| Filter rows | fr-+ attribute name for which the filter is being applied | If the filter step is based on a filter condition for the state attribute, name the step fr-state. |
| Get system info | gsi-+ attribute name for which information is being selected | Name this step as gsi-+ the name of the attribute being generated. If the system_date is being pulled, name the step gsi-system_date. |
| Insert/Update | iu-+ target/entity name for which the update strategy is being defined | If the insert/update strategy is being defined for the table customer, name the step iu-customer. |
| Select values | sv-+ purpose + attribute | Use this step to clean up a data stream so that only the needed columns are included or so the columns have the correct name or data type. If you are renaming attribute reason_1 to reason, name the step sv-rename_reason. |
| Table input | ti-+ source/subject name | If the source data is defined on table dim_product, then name the step ti-dim_product. If many tables are used, provide a subject name that represents the data being pulled, like ti-transaction_data. |
| Table output | to-+ the name of the target | These step names should represent the target table. If you are inserting records into the customer table, name the step to-customer. |

Related Information

Here are some links to information that you may find helpful while using this best practices document:

- [Components Reference](#)

Finalization Checklist

This checklist is designed to be added to any implemented project that uses this collection of best practices, to verify that all items have been considered and reviews have been performed. (Compose specific questions about the topics in the document and put them in the table.)

Name of the Project: _____

Date of the Review: _____

Name of the Reviewer: _____

| Item | Response | Comments |
|--|--------------------|----------|
| Did you set up a clearly named folder structure? | YES _____ NO _____ | |
| Did you systematically name folders, jobs, transformations, and steps? | YES _____ NO _____ | |

Appendix 1: Job Entry Naming Conventions

Here is the complete list of job entry naming conventions:

Table 5: Job Entry Naming Conventions

| Job Entry Name | Naming Convention |
|---------------------------------------|--|
| Abort job | 'abrt-' + purpose/reason |
| Add filenames to result | 'afntr-' + file name/purpose |
| Amazon EMR Job Executor | 'aemrje-' + job name |
| Amazon Hive Job Executor | 'ahje-' + job name |
| BulkLoad from Mysql into file | 'blmysqlf-' + file name/purpose |
| BulkLoad into MSSQL | 'blmssql-' + target |
| BulkLoad into Mysql | 'blmysql-' + target |
| Check Db connections | 'chkdbc-' + connection name/purpose |
| Check files locked | 'chkfl-' + file/subject area/purpose' |
| Check if a folder is empty | 'chkfldr-' + folder name/purpose |
| Check if connected to repository | 'chkrepo-' + repo name/purpose |
| Check if XML file is well formed | 'chkxml-' + xml name/purpose |
| Check webservice availability | 'chkws-' + webservice name/purpose |
| Checks if files exist | 'chkfe-' + file name/subject area |
| Columns exist in a table | 'colex-' + column name/table name/subject area |
| Compare folders | 'cfldrs-' + purpose/subject area |
| Convert file between Windows and Unix | 'cnvrtf-' + file name/purpose |
| Copy Files | 'cf-' + file name/subject area/purpose |
| Copy or Move result filenames | 'cmf-' + file name/subject area/purpose |
| Create a folder | 'cflldr-' + folder name |
| Create file | 'cf-' + file name |
| Decrypt files with PGP | 'dpgp-' + file name/subject area/purpose |
| Delete file | 'df-' + file name |
| Delete filenames from result | 'dffr-' + file name/subject area/purpose |
| Delete files | 'dfls-' + file name/subject area/purpose |
| Delete folders | 'dfldrs-' folder name/subject area/purpose |
| Display MsgBox Info | 'msgbox-' + purpose |
| DTD Validator | 'dtdval-' + dtd file name/xml file name |
| Dummy | 'dmmy-' + purpose |

| Job Entry Name | Naming Convention |
|---------------------------------|--|
| Encrypt files with PGP | 'epgp-' + file name/subject area/purpose |
| Evaluate files metrics | 'evalfm-' + file name/subject area/purpose |
| Evaluate rows number in a table | 'evalrnt-' + table name/purpose |
| Export repository to XML file | 'erepo-' + xml file name |
| File Compare | 'fc-' + files/subject area/purpose |
| File Exists | 'fe-' + file name/subject area/purpose |
| FTP Delete | 'ftpd-' + ftp server name/file name/subject area/purpose |
| Get a file with FTP | 'gftp-' + file name |
| Get a file with FTPS | 'gftps-' + file name |
| Get a file with SFTP | 'gsftp-' + file name |
| Get mails (POP3/IMAP) | 'gmail-' + purpose/subject area |
| Hadoop Copy Files | 'hadcp-' + file name/purpose/subject area |
| Hadoop job executor | 'hadje-' + job name |
| HL7 MLLP Acknowledge | 'hl7ack-' + server name/message/purpose |
| HL7 MLLP Input | 'hl7i-' + source |
| HTTP | 'http-' + purpose/webpage name |
| JavaScript | 'js-' + purpose |
| Job | Job Name |
| Mail | 'mail-' + purpose |
| Mail validator | 'mailv-' + purpose |
| Move Files | 'mf-' + file name/purpose/subject area |
| MS Access Bulk Load | 'msabl-' + target |
| Oozie Job Executor | 'oozje-' + job name |
| Palo Cube Create | 'pcc-' + cube name |
| Palo Cube Delete | 'pcd-' + cube name |
| Pentaho MapReduce | 'pmr-' + purpose |
| Pig Script Executor | 'pse-' + script name/purpose |
| Ping a host | 'ping-' + host name/purpose |
| Put a file with FTP | 'pftp-' + file name |
| Process result filenames | 'prfn-' + file name/purpose/subject area |
| Put a file with SFTP | 'psftp-' + file name |
| Send information using Syslog | 'syslog-' + server name/message purpose |
| Send Nagios passive check | 'nagios-' + host name/message purpose |

| Job Entry Name | Naming Convention |
|--------------------------------|---|
| Send SNMP trap | 'snmp-' + server name/message purpose |
| Set variables | 'svar-' + purpose |
| Shell | 'shll-' + script name/purpose |
| Simple evaluation | 'se-' + purpose/attribute |
| SQL | 'sql-' + action/purpose/file name |
| Sqoop Export | 'sqpex-' + target |
| Sqoop Import | 'sqpim-' + source |
| SSH2 Get | 'ssh2g-' + source |
| SSH2 Put | 'ssh2p-' + target |
| Start | Start |
| Start a PDI Cluster on YARN | 'strtyarn-' + cluster schema/purpose |
| Stop a PDI Cluster on YARN | 'stpyarn-' + cluster schema/purpose |
| Success | Success |
| Table exists | 'tble-' + table name |
| Talend Job Execution | 'talje-' + job name |
| Transformation | Transformation name |
| Truncate tables | 'trunc-' + purpose/schema name |
| Unzip file | 'unzip-' + file name/purpose |
| Upload files to FTPS | 'uftp-' + file name/purpose/subject area |
| Verify file signature with PGP | 'vpgp-' + file name/purpose |
| Wait for | 'wait-' + purpose |
| Wait for file | 'waitf-' + file name |
| Wait for SQL | 'waits-' + purpose |
| Write to file | 'wtf-' + file name |
| Write To Log | 'wtl-' + purpose/job name |
| XSD Validator | 'xsdval-' + xml file name |
| XSL Transformation | 'xlst-' + xml file name/output file name' |
| Zip file | 'zip-' + file name |

Appendix 2: Step Naming Conventions

Here is the complete list of step naming conventions:

Table 6: Step Naming Conventions

| Step Name | Naming Convention |
|------------------------------------|--|
| Abort | 'abrt-' + purpose/reason |
| Add a checksum | 'chksum-' + subject name/purpose |
| Add Constants | 'ac-' + attribute/subject name |
| Add Sequence | 'aseq-' + attribute name for which sequence is being generated |
| Add value fields changing sequence | 'chgseq-' + attribute/purpose |
| Add XML | 'axml-' + subject name/reason |
| Analytic Query | 'aq-' + subject name/purpose |
| Append Streams | 'as-' + subject name/purpose |
| ARFF Output | 'arffo-' + target |
| Automatic Documentation Output | 'ado-' + target |
| Avro input | 'avroi-' + source/subject name |
| Block this step until steps finish | 'bsusf-' + purpose/subject name |
| Blocking Step | 'bs-' + purpose/subject name |
| Calculator | 'calc-' + purpose |
| Call DB Procedure | 'dbproc-' + procedure name |
| Call Endpoint | 'endpt-' + purpose/subject name |
| Cassandra input | 'cassi-' + source |
| Cassandra output | 'casso-' + target |
| Change file encoding | 'chgfe-' + purpose/subject name |
| Check if a column exists | 'chkce-' + column name |
| Check if file is locked | 'chkfl-' + file name |
| Check if webservice is available | 'chkwsa-' + webservice name |
| Clone Row | 'cr-' + purpose |
| Closure Generator | 'cg-' + Hierarchy |
| Combination lookup/update | 'clkpu-' + table name |
| Concatenate Fields | 'cf-' + name of target/purpose |
| Copy Rows to Result | 'crtr-' + purpose/subject name |
| CouchDB Input | 'cdbi-' + source name |

| Step Name | Naming Convention |
|-------------------------------------|---|
| Credit card validator | 'ccval-' + field name/card type |
| CSV file input | 'csvi-' + source name |
| Data Grid | 'dg-' + source/subject name |
| Data Validator | 'dval-' + purpose/subject name |
| Database Join | 'dbjn-' + purpose |
| Database Lookup | 'dblkp-' + attribute name for which lookup is being performed |
| Delay row | 'delr-' + purpose/subject name |
| Delete | 'del-' + target name |
| De-serialize From File | 'dsff-' + name of object/purpose |
| Detect Empty Stream | 'des-' + subject name/purpose |
| Dimension Lookup/Update | 'dimlu-' + dimension to be updated |
| Dummy (do nothing) | 'dmy-' + purpose/subject name |
| Dynamic SQL row | 'dsqrlr-' + purpose/table name |
| Edi to XML | 'edixml-' + purpose/target |
| ElasticSearch Bulk Insert | 'elsbi-' + target name |
| Email messages input | 'emsgi-' + source/subject name |
| ESRI Shapefile Reader | 'esri-' + source/subject name |
| ETL Metadata Injection | 'emi-' + purpose |
| Execute a process | 'execp-' + process name |
| Execute row SQL script | 'exrsql-' + purpose/subject name |
| Execute SQL script | 'exsqls-' + script name |
| File Exists | 'fe-' + filename |
| Filter Rows | 'fr-' + attribute name for which filter is being applied |
| Fixed file input | 'fxdfi-' + file name |
| Formula | 'frmla-' + attribute/subject name |
| Fuzzy match | 'fzzym-' + purpose/subject name |
| Generate random credit card numbers | 'grcc-' + purpose/subject name |
| Generate random value | 'grval-' + attribute/subject name |
| Generate Rows | 'gr-' + attribute/subject name |
| Get data from XML | 'gdxml-' + source |
| Get File Names | 'gfn-' + file/purpose |
| Get files from result | 'gffr-' + files/purpose |

| Step Name | Naming Convention |
|---|---|
| Get Files Rows Count | 'gfrfc-' + file/purpose |
| Get ID from slave server | 'gidfss-' + purpose/slave server name |
| Get repository names | 'grnms-' + repo name/purpose |
| Get rows from result | 'grfr-' + purpose/subject area |
| Get Session Variables | 'gsvars-' + purpose/variable name |
| Get SubFolder names | 'gsfnms-' + purpose/directory name |
| Get System Info | 'gsi-' + attribute name for which information is being selected |
| Get table names | 'gtbls-' + schema name/purpose |
| Get Variables | 'gv-' + purpose/target table name |
| Google Analytics | 'gglea-' + purpose |
| Google Docs Input | 'ggledi-' + source/purpose |
| Greenplum Bulk Loader | 'gpbl-' + target |
| Greenplum Load | 'gpl-' + target |
| Group By | 'grp-' + attribute/subject name |
| GZIP CSV Input | 'gzcsvi-' + source |
| Hadoop File Input | 'hdpfi-' + source |
| Hadoop File Output | 'hdpfo-' + target |
| HBase input | 'hbsi-' + source |
| HBase output | 'hbso-' + target |
| HBase Row Decoder | 'hbsrd-' + purpose/subject area/table name |
| HL7 Input | 'hl7i-' + source |
| HTTP client | 'httpc-' + purpose |
| HTTP Post | 'httpp-' + purpose/web page |
| IBM Websphere MQ Consumer | 'ibmc-' + source |
| IBM Websphere MQ Producer | 'ibmp-' + target |
| Identify last row in a stream | 'idlr-' + purpose/field name |
| If field value is null/Replace Null Value | 'rnv-' + subject name |
| Infobright Loader | 'ibldr-' + target |
| Ingres VectorWise Bulk Loader | 'vwbldr-' + target |
| Injector/Row Injector | 'rinj-' + purpose |
| Insert/Update | 'iu-' + target/entity name for which update strategy is being defined |
| Java Filter | 'javaf-' + purpose/field name |

| Step Name | Naming Convention |
|-------------------------------|---|
| JMS Consumer | 'jmsc-' + source |
| JMS Producer | 'jmsp-' + target |
| Job Executor | 'je-' + target job name |
| Join Rows (cartesian product) | 'jr-' + purpose |
| JSON Input | 'jsoni-' + source |
| JSON output | 'jsono-' + target |
| Knowledge Flow | 'kfl-' + source/purpose |
| LDAP Input | 'ldapi-' + source |
| LDAP Output | 'ldapo-' + target |
| LDIF Input | 'ldifi-' + source |
| Load file content in memory | 'lfcml-' + source |
| LucidDB Bulk Loader | 'ldbbl-' + target |
| LucidDB Streaming Loader | 'ldbsl-' + target |
| Mail | 'mail-' + purpose/subject name |
| Mail Validator | 'mailv-' + purpose |
| Mapping (sub-transformation) | 'm-' + purpose |
| Mapping input specification | 'mis-' + purpose/source |
| Mapping output specification | 'mos-' + purpose/target |
| MapReduce Input | 'mapri-' + source |
| MapReduce Output | 'mapro-' + target |
| MaxMind GeoIP Lookup | 'mmndlkp-' + source |
| Memory Group by | 'mgb-' + purpose/field name |
| Merge Join | 'mj-' + purpose |
| Merge Rows (diff) | 'mr-' + purpose |
| Metadata structure of stream | 'mdss-' + purpose |
| Microsoft Access Input | 'msai-' + source |
| Microsoft Access Output | 'msao-' + target |
| Microsoft Excel Input | 'msxlsi-' + source |
| Microsoft Excel Output | 'msxlso-' + target |
| Microsoft Excel Writer | 'msxlsw-' + target |
| Modified Java Script Value | 'mjstv-' + attribute name being generated |
| Mondrian Input | 'mndrni-' + source |
| MonetDB Agile Mart | 'mdbam-' + target |
| MonetDB Bulk Loader | 'mdbbl-' + target |

| Step Name | Naming Convention |
|--------------------------|---|
| MongoDB Input | 'mdbi-' + source |
| MongoDB Output | 'mdbo-' + target |
| Multiway Merge Join | 'mwmj-' + purpose |
| MySQL Bulk Loader | 'mysqlbl-' + target |
| Null if... | 'null-' + field name/purpose |
| Number range | 'nbr-' + field name/purpose |
| OLAP Input | 'olapi-' + source |
| OpenERP Object Delete | 'erpdel-' + target |
| OpenERP Object Input | 'erpinp-' + source |
| OpenERP Object Output | 'erpout-' + target |
| Oracle Bulk Loader | 'orabl-' + target |
| Palo Cell Input | 'paloi-' + source |
| Palo Cell Output | 'paloo-' + target |
| Palo Dimension Input | 'palodi-' + source |
| Palo Dimension Output | 'palodo-' + target |
| Pentaho Reporting Output | 'pro-' + target |
| PostgreSQL Bulk Loader | 'psqlbl-' + target |
| Prioritize Streams | 'ps-' + name of key field/purpose |
| Process files | 'pfiles-' + source/directory/subject name |
| Property Input | 'pi-' + source |
| Properties Output | 'po-' + name of target file/purpose |
| R script executor | 'rscript-' + script name |
| Regex Evaluation | 're-' + purpose |
| Replace in String | 'ris-' + file/purpose |
| Reservoir Sampling | 'rs-' + purpose |
| REST Client | 'rest-' + source/purpose |
| Output steps metrics | 'osm-' + subject name |
| Row De-Normalizer | 'rdnml-' + source/subject name |
| Row flattener | 'rf-' + purpose/source field |
| Row Normalizer | 'rnml-' + source/subject name |
| RSS Input | 'rssi-' + source |
| RSS Output | 'rso-' + target |
| Rules Accumulator | 'racc-' + source/purpose |
| Rule Executor | 'rexe-' + source/purpose |

| Step Name | Naming Convention |
|-------------------------------|----------------------------------|
| Run SSH commands | 'rssh-' + source/purpose |
| S3 CSV Input | 's3csvi-' + source |
| S3 File Output | 's3fo-' + target |
| Salesforce Delete | 'slsfd-' + target |
| Salesforce Input | 'slsfi-' + source |
| Salesforce Insert | 'slsfinsrt-' + target |
| Salesforce Update | 'slsfu-' + target |
| Salesforce Upsert | 'slsfupsrt-' + target |
| Sample rows | 'smlr-' + purpose |
| SAP HANA Bulk Loader | 'sapbl-' + target |
| SAP Input | 'sapi-' + source |
| SAS Input | 'sasi-' + source |
| Script | 'scrpt-' + purpose |
| Secret key generator | 'skgen-' + purpose/key field |
| Select Values | 'sv-' + purpose |
| Send message to Syslog | 'smsgsl-' + target/purpose |
| Serialize to File | 'stf-' + name of target/purpose |
| Set field value | 'sfv-' + field name/purpose |
| Set field value to a constant | 'sfvc-' + field name/purpose |
| Set files in result | 'sfnr-' + filename field/purpose |
| Set Session Variables | 'ssvar-' + purpose/variable name |
| Set Variables | 'svar-' + purpose |
| SFTP Put | 'sftpp-' + target/purpose |
| Simple Evaluation | 'se-' + subject name |
| Simple Mapping | 'sm-' + target/purpose |
| Single Threader | 'sthr-' + target/purpose |
| Socket reader | 'scktr-' + source |
| Socket writer | 'scktw-' + target' |
| Sort Rows | 'sr-' + purpose |
| Sorted Merge | 'sm-' + purpose |
| Split Fields | 'sf-' + purpose |
| Split Fields to rows | 'sftr-' + purpose |
| Splunk Input | 'splnki-' + source |
| Splunk Output | 'splnko-' + target |

| Step Name | Naming Convention |
|--|-------------------------------------|
| SQL File Output | 'sqlfo-' + target |
| SSTable Output | 'sstblo-' + target |
| Stream Lookup | 'slkp-' + attribute name/purpose |
| Streaming XML Input | 'sxmli-' + source |
| String Cut | 'sc-' + purpose |
| String Operation | 'so-' + name of key field/purpose |
| Switch/Case | 'swcs-' + process being evaluated |
| Symmetric Cryptography | 'symc-' + result field name/purpose |
| Synchronize after merge | 'syncham-' + target |
| Table Agile Mart | 'tblam-' + purpose |
| Table Compare | 'tblc-' + target/purpose |
| Table exists | 'tble-' + target |
| Table Input | 'ti-' + source/subject name |
| Table Output | 'to-' + name of the target |
| Teradata Fastload Bulk Loader | 'tdbl-' + target |
| Teradata TPT Insert Upsert Bulk Loader | 'tdiubl-' + target |
| Text File Input | 'tfi-' + file name/purpose |
| Text File Output | 'tfo-' + file name |
| Transformation Executor | 'te-' + transformation name/purpose |
| Unique Rows | 'ur-' + field name/purpose |
| Unique rows (HashSet) | 'urh-' + field name/purpose |
| Univariate Statistics | 'unvstats-' + field name/purpose |
| Update | 'updt-' + name of target |
| User Defined Java Class | 'udjc-' + purpose/field name |
| User Defined Java Expression | 'udje-' + purpose |
| Value Mapper | 'vm-' + subject name/purpose |
| Vertica Bulk Loader | 'vbl-' + target |
| Web services lookup | 'wslkp-' + target/purpose |
| Write to log | 'wlog-' + purpose |
| XBase input | 'xbsi-' + source |
| XML Input | 'xmli-' + source |
| XML Input Stream (StAX) | 'xmlis-' + source |
| XML Join | 'xmlj-' + target/purpose |

PDI Naming Standards

| Step Name | Naming Convention |
|--------------------|-------------------------------|
| XML Output | 'xmlo-' + name of the target |
| XSD Validator | 'xsdv-' + purpose/source file |
| XSL Transformation | 'xslt-' + source/purpose |
| Yaml Input | 'yamli-' + source |