

Process Runner – over LSMW / eCATT, SECATT

SAP® provides a technical tool known as the Legacy System Migration Workbench (LSMW) to assist with data migration during initial implementation. LSMW is also used by some SAP customers to make mass changes to master data and perform mass data (transactional) updates. Similarly SAP offer eCATT and SECATT tools for performing test data management. LSMW, eCATT, SECATT are considered very technical and comparatively complex tool, requiring skilled resources with developer authorizations.

Apart from ease-of-use, Process Runner has many advantages over these standard tools. Some of the benefits include:

- Process Runner does not require any special developer authorizations and uses existing user authorizations.
- Process Runner does not use or require system transports. For example, a process can be recorded in the development system, tested, and then immediately the same recording can be run on the production (or any other) system. The same recording works on any SAP system that the user has access to (however, user authorizations are always system-specific).
- Process Runner can record almost ANY standard or custom SAP transaction, resulting in much more functional breadth than the LSMW batch recorder. LSMW usually cannot record and playback Enjoy and transactions that involves new Control Framework technology.
- Process Runner can automate the loading of data for both and header and multiple line item detail records for transactions that have variable line items (e.g. Purchase Orders, or Invoices). LSMW does not natively support variable line items and to do so would require complex programming.
- Process Runner is integrated with Excel and does not require any special file format. LSMW requires an explicit tab/comma delimited format only.
- Process Runner Data Extract functionality allows a user to download data from ANY SAP table or view directly to Excel, a text file, or other data sources (including Oracle, Sybase, Access, MS SQL).
- Process Runner automatically saves the SAP messages that are returned during the data load and embeds the messages in the data file. This technique provides immediate audit trail feedback for all transactions, and the convenience of correcting and reprocessing records with errors by running the recording again for only the error records.

Process Runner is simply much easier to use, with more functionality than any other SAP data integration tool, resulting in increased business user productivity without requiring developer or DBA resources or time-consuming system transports.

Below is a comparison chart between two technologies, followed by a chapter on internal processing and performance.

Features/Rules/Constraints	LSMW/eCATT/SECATT	Innowera Process Runner
Ease of use	Fairly technical and complex tool, requiring highly skilled resources with developer authorizations; usually used to load large volumes of data during initial implementation.	Easy and can be used with the least technical knowledge.
Direct Excel interface	Native Excel file is not supported. No log is written back to original file.	Direct and Live Excel integration. No conversion is required. SAP log is written in Excel file against each of the data records.
Functionality	Difficult to record and map custom transactions with the LSMW batch recorder.	Records standard or custom SAP transactions. Functionality includes Transactions, (including Enjoy Transactions), Business APIs, and Data Extraction all from one user interface.
Enjoy Transactions /ALV Grids	Cannot record Enjoy, ALV Grid transaction or events.	Process Runner GUI Scripting can record and playback Enjoy as well as ALV Grid and other new control objects.
Simulation and Validation	Not Possible. Data must be loaded or not.	Local as well as SAP simulation and test runs enable data checks without actually loading the data. Local Validation offers extensibility to a Designer User to implement advance local validation and checks using VB Script.
Error Reporting and Processing	Cumbersome error reporting and processing. Correlation to original data line has to be done manually. Reprocessing of errors needs additional steps.	Advanced error reporting and processing. Color coded error is automatically reported in front of each line. One click error reprocessing eliminates need to filter and rearrange the load.
Performance	Start-to-Finish time is typically longer for LSMW than Process Runner.	Noticeable improvement in performance in technical as well as process time. Please refer to next section "Process Runner Updates & Performance" for more details.
Loading of data for transactions that have variable line items (Purchase Orders, Invoices, etc.)	LSMW does not support variable line items and would require complex programming.	Automates loading of data for both Header and Multiple Line Item detail records.
Handling of 999+ lines	LSMW does not support this; advanced custom ABAP programming is required.	Process Runner supports this without needing any ABAP development – works out of the box.

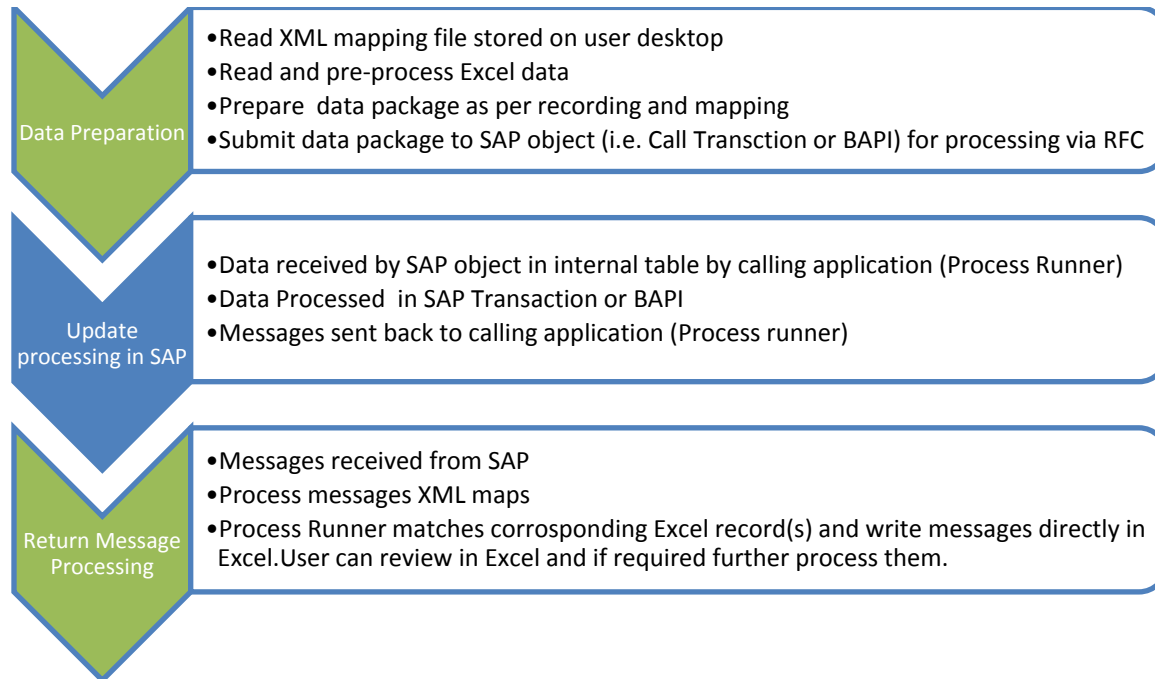
Features/Rules/Constraints	LSMW/eCATT/SECATT	Innowera Process Runner
Vertically placed Condition and Pricing Records	Data from multiple columns cannot be sent to multiple transactions without ABAP enhancement – making LSMW usage impossible for most users.	Can easily send data from more than one column to multiple transactions. Feature widely used in conditions and pricing records where rate per period is maintained in columns and must be saved as a separate condition records per column.
Supported file format	Requires explicit tab/comma delimited format only.	Integrated with Excel and does not require any special file format. Additionally, Process Runner DB can support various databases including Oracle, MS-SQL, MS-Access, and Sybase.
Data Extraction on varied data sources	Feature is not available with LSMW. Traditional SE16/17 is very basic as compared to solution offered by Process Runner (additional documentation available comparing Process Runner Data Extractor with SE16).	Data Extract functionality allows you to download data from ANY SAP table or view, directly to Excel, or a text file, or other data sources like Oracle, Sybase, Access, MS SQL, etc.
Integration / Extensibility	Limited integration available. Primarily via ABAP.	Integration possible using VB Scripts, Java Scripts, Power Shell. Extended integration can enable many tasks outside the SAP system. For example, sending automated e-mail with success/error report at the end of each run.
Audit Trail capability	Legacy audit techniques. Difficult to use and search.	Automatically saves the SAP messages that are returned during the data load and embeds the messages in the data file. This technique provides immediate audit trail capability for all transactions, and the convenience of correcting and reprocessing records with errors by running the recording again for only the error records.
Special Developer authorizations	Required.	Not required. Uses the existing user authorizations. If required, additional controls can be implemented by Innowera licensing and control panel mechanism.
System transports/exports	Required & time consuming.	Not required. A process can be recorded in the development system, tested, and then immediately the same recording can be run on the production (or any other) system. The same recording works on any SAP system that the user has access to.
Reusability Across team members	Does not have process based reusability across expert and not so expert users. Everyone must be expert or trained enough to use these tools	Process Runner offers cross-team re-usability by offering Designer (expert) and Run-Only (not so expert) roles and licenses. These allows for team collaboration between technical expert and data owners.

Features/Rules/Constraints	LSMW/eCATT/SECATT	Innowera Process Runner
Support	Internally supported solution. End solution support dependant on resources available.	Vendor supported solution; cost of technical support is usually much lower than a typical internal rate. Also enables exchanges on the best practices in data maintenance from our worldwide customer support experience.
Ready to Use Templates	None	Process Runner comes with hundred of useful and ready to run Templates along with sample data. Innowera is constantly adding new processes to its cloud library and making it available to all of its customer. This could possibly result in significant time savings.
In-Place Excel and Report Write export to Excel	Not supported directly. SAP Reports written to Excel cannot be saved and transformed. Will have to re-write them or will have to write an ABAP wrapper to achieve this.	Direct support of saving In-Place Excel and Report Write export to Excel output (Table/Pivotal table etc.). Also support of converting MHTML/XML report to Excel
Granular Table Row or Record level data extraction control	Very limited row/record level control available with standard authorization (i.e. S_TABU_LIN).	Process Runner Data Extraction offers Extended Data Extraction capability that offers granular table row/record level control to restrict downloads as per customer defined organization criteria (e.g. Plant or Company code etc.).

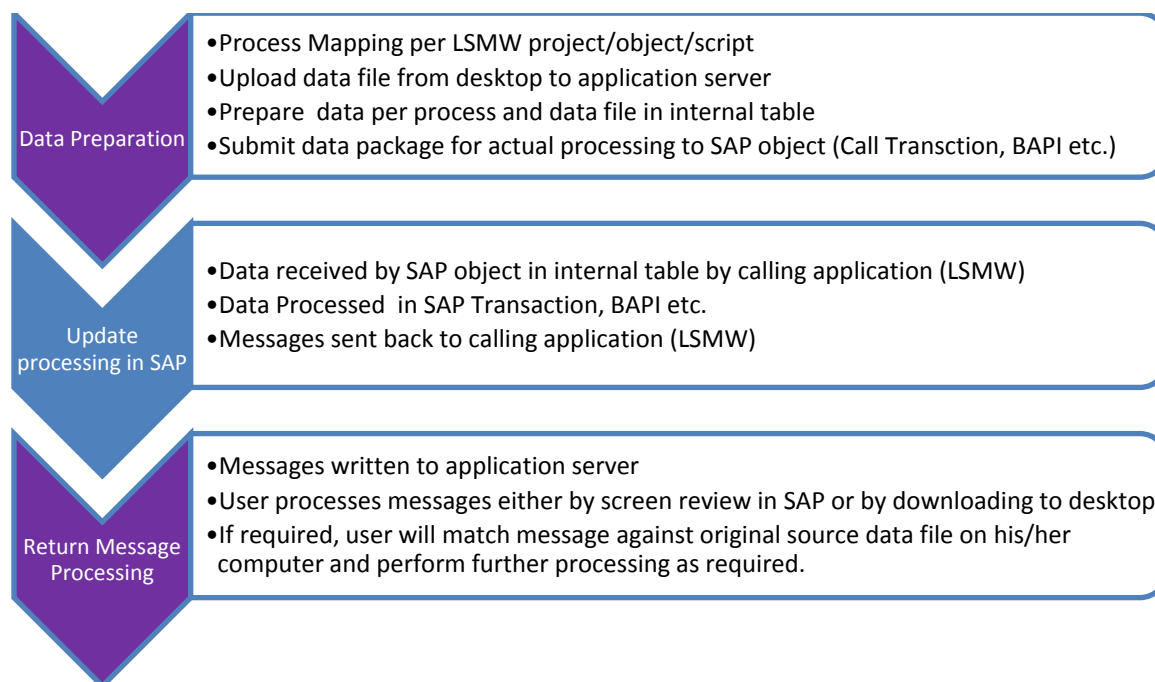
Process Runner Updates & Performance

Following are 3 broad steps to understand how Process Runner compares to LSMW/eCAT/SECATT on a technical layer:

Process Runner



LSMW



Note the following on Process Runner performance:

1. End to End time i.e. all 3 boxes above, is typically **noticeably** better in Process Runner as compared to LSMW, eCATT, SECATT.
2. SAP Processing (2nd box in above graphics) time is captured, displayed and logged separately in Process Runner. This time is usually very close to LSMW.
3. Process Runner can open parallel connections/threads to SAP. With that, overall SAP Processing time can be further improved.
4. Many of the Process Runner procedures are multi-threaded (always responsive) and non-blocking (can stop SAP process in between).
5. Typical round trip time (all 3 boxes above for Process Runner) for a simple transaction update is less than a second in most production instances we have studied.