

Are you planning for a Migration to PI/PO- Here is the quick Checklist for you

Hello There,

If you are planning to migrate from other middleware to SAP PI/ or planning to get your older version(XI and PI) upgraded to SAP PO(Process Orchestration) and you are looking for few tips and check list then you are in a right place.

In this article I am going to list all the points that I have gone through during my recent migration as well as upgrade project.

Let me clear the difference between upgrade and Migration as it is confusing.

Migration is moving from one software to another software for various business and financial reason whereas **Upgrade** is to upgrade the existing software to higher version to cater the business need the software is lower version to

Why customers are not going for the latest releases?

- It is too difficult to get the system upgraded.
- They are licensed differently.
- Don't want to take the risk with an existing stable system.
- Downtime during the upgrade.
- Timelines and cost involved and so on...

Why Upgrade?

We all know that the mainstream maintenance for SAP NetWeaver releases 7.1x, 7.3x, and 7.4 is coming to end by 2020. It's time to start planning for an

upgrade/migration project to move to release 7.5.

There are many advantages to have the latest updated system:

- **Latest Release:** With the new Functionality available in the latest Support Pack can be used to enhance your scenarios without having to do any workarounds.
- **Improve Performance:** As you know single stack java is always best fit compared to multiple to and pro call between Java and ABAP engines.
- **Get away with junks-** Good opportunity to cleanup up unnecessary objects which were running for years together without any usage
- **Simplify** – Good chance to relook and simplify the objects either by redesign or removing the step/s
- **Updated Security:** With the latest release, all the security bugs can be fixed from time to time.
- **Different Licensing:** We can make use of the subscription-based licensing to save cost
- **SAP Support:** During implementation, we might face problems in the software that we need SAP to fix.
- **Easy to maintain:** It would be much easier to maintain the code by implementing available standard functionality than having custom code/workaround.
- **Minimal/No Support for old Version:** We will be getting the SAP support with the latest release as SAP has a limit on support time for each release.

Still if you are NOT happy then please check the [13 reasons for migrating SAP PI to SAP PO](#)

Available options for Upgrade/Migration:

- Either upgrade/migrate to PO 7.5 Or to AEX 7.5

- Either upgrade/migrate to PI dual usage type 7.5

See more details on [what options do we have when upgrading or migrating to release 7.5](#) and <https://blogs.sap.com/2018/02/01/upgrading-sap-xi-or-sap-pi-to-sap-po/>

During this migration all the integration content has to be moved to the latest versions. We can make use of [SAP tool to migrate dual stack ID objects to Integrated Configuration Objects](#)

https://www.youtube.com/watch?v=gAUv7f5_vIQ&feature=share

User should have below roles

SAP_XI_API_DISPLAY_J2EE – Source System

SAP_XI_API_DEVELOP_J2EE – Target System

Once it is SSL enabled, access the tool using the URL

<https://<host>:<port>/webdynpro/resources/sap.com/tc~pi~tools~dirmig~wd/DirectoryCockpit>

• Connectivity

- Communication Channels (Replace all ABAP adapters with JAVA adapters)
 - IDoc -> IDoc_AAE
 - XI -> SOAP (XI 3.0)
 - HTTP -> HTTP_AAE
 - WS -> WS_AAE
- RFC Destinations
 - Use Destinations in NWA to create HTTP and RFC connections to backends

• Mapping

- No more use of ABAP/ABAP-XSLT: Redesign in Java!
- Keep on using Swing Client! NWDS/Eclipse is not comfortable enough...

• Routing

- Classic Routing -> Integrated Configuration (ICO)
 - Make sure you understand the settings for Staging & Logging!
- Multi-Adapter Engine Usage (ICO-ICO)
- Usage of iFlows & Folders in NWDS/Eclipse (optional, but recommended)

• BPM

- Redesign ccBPMs: replace BPM by Adapter Modules (e.g. Async-Sync Bridge) or Collect BPMs
- Create BPM processes to replace ccBPM
- **Basis**
 - CTS+ now e.g. via ABAP Stack of SAP Solution Manager
 - User Management now locally (UME) or connected to Active Directory
 - Set up NWDI for BPM Design Time Repository & Transport
- **Monitoring**
 - No more SXMB_MONI
 - All messages are visible in PIMON
- **Alerting**
 - New Message based alerting available, configured in DIR/NWA
- **Backend Systems (SAP ECC/ERP, CRM, SRM, ...)**
 - IDoc – WE21: New IDoc Port to connect with IDoc_AAE via RFC Destination type T (SAP Gateway)
 - ABAP Proxy – SXMB_ADM: Point to Adapter Engine RFC Destination instead to Integration Engine (configured globally or per outbound Service Interface/Proxy)

The below list of functionalities might impact partially or even completely.

Area	Activity	Objects
SLD	In case you are using a central SLD, point your PO system there. Otherwise you Export/Import	> Software Products > Software components > Technical Systems > Business Systems
ESR	Export/Import via TPZ all relevant objects. Decide which source system to use (DEV/QAS/PROD)	> Software components
DIR	Migrate all Channels & Routings using the tool where possible	> Communication Channels > Business Components > Routing Objects
NWA	(Re-)define the relevant objects	> Keystore

	in NetWeaver Administrator	> Destinations > User Management > Alert Configuration
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Activities during upgrade/migration:

- PO system URL working or not
- SLD Checks
- ESR and ID Application Checks
- CTS+ Transport Organizer Checks
- RWB: Message Monitoring; Channel Monitoring; IDoc Monitoring
- Migration Tool for ID objects conversion.
- NWA: RFC, HTTP Destinations, inbound and outbound Resource Adapters, Certificates and Keys, Alert Configurations, Adapter Services.
- In case of Dual usage Type Upgrade:
 - *All the PI codes need to be checked.
 - *RFC destination from PI system to Target Destinations.

Frequently faced issues during upgrade/migration.

1. Unable to access ESR and ID
 - Disable SAPLOCALHOSTFULL parameter.
 - In /dir URL -> Administration -> Parameters. Repository -> Exchange Profile. Click on Parameters.
2. ESR and ID don't have the latest 7.5 version configurations:
 - o BASIS need to run the wizard
3. Adapters not opening in ID:
 - o SLD sync issues, BASIS needs to refresh the SLD cache.
4. URL error popup Messages while saving an object:
 - o Cache Refresh Issue
5. RFC connections error between ECC and PI:
 - o User locked, password issues, BASIS needs to check the connection and update passwords if required.
6. SXMB_IFR from PI ABAP stack routes to different URL – /sap/public/myssocntl/?sap-client=100 after dual split usage:
 - o SXMB_IFR is not available after dual stack split.
7. HTTP connection to http://<host>:<port>/sap/xi/cache?sap-client=100 returns status code '404' (Not Found) in response:
 - o {SAP Note2273975 }- PI CTC: Inappropriate ABAP HTTP Port proposed by Split Wizard
8. File channels Error with permission issue:

- Permission issue {SAP Note-2464888}
- 9. SFTP Advantco Channels Error:
 - License issues might occur.
- 10. SOAP channels Error:
 - The adapter needs to be restarted in RWB {SAP Note-1347828}

Thanks to Pavan G for [real time example](#)

References

Automated test tools

INT4 and [Figaf](#) provide automated test tools to reduce the manual test effort.

https://www.youtube.com/watch?time_continue=20&v=X2qGglsalTY&feature=emb_logo

This tool is built by a well reputed SAP mentor [Daniel Graversen](#) and provides following benefits :

- Document development changes
- Make testing so easy that it is done properly
- Test what has been changed
- Reduce the risk with Support Packs
- Free time for developers and business from testing and documentation

Mapping Migration for B2B

[Figaf](#) provides an automatic conversion of Seeburger Message Mappings into SAP B2B Add-on based Message Mappings

[SAP PI to SAP PO Dual Stack Migration Tools](#)

[Upgrading SAP XI to PO](#)

[SAP PI to SAP PO Migration Approaches](#)

<https://www.integration-excellence.com/sap-pi-to-po-migration-checklist/>

<https://www.int4.com/sap-pi-7-xx-dual-stack-to-sap-po-7-5-migration-lessons-learned/>

<https://figaf.com/updating-a-sap-pi-po-system-what-to-think-about/>