

# App Connect Enterprise V11 migration approach

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IBM® App Connect Enterprise Version 11.0 supports parallel migration and extract migration to migrate your application logic to Version 11.0 systems.

If you want to reproduce the integration node function on another computer, you can use parallel migration to associate the application logic on your existing integration node with a separate Version 11.0 integration node.

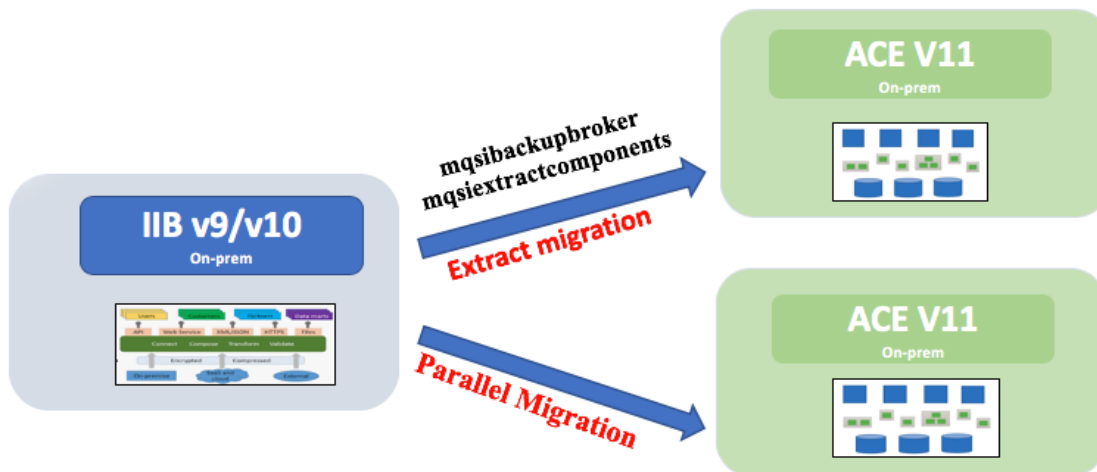
By using extract migration, you can migrate existing integration server configuration and resources to IBM App Connect Enterprise Version 11.0. Please refer to [this Knowledge Center link](#) for more details.

In this article, we attempt to provide a schematic view of migration options from IBM Integration Bus V9/V10 and some key considerations which may assist you in deciding your migration strategy. Although there is no direct migration path available from WMB V8 to ACE V11 (via mqsixtractcomponents), we depict the possible approach you could adopt to migrate from WMB V8 to ACE V11.

## Migration options

### IIB V9/V10 to ACE V11

#### Migration Approach – IIB V9/V10 to ACE V11



#### Option 1 – When source code is available

BAR files/Message flows projects, config services etc. available

Extract Migration

Use mqsibbackupbroker & mqsixtractcomponents

Parallel Migration

You may choose to deploy existing artifacts as-is or may need to refactor for various reasons ([See the refactoring section](#))

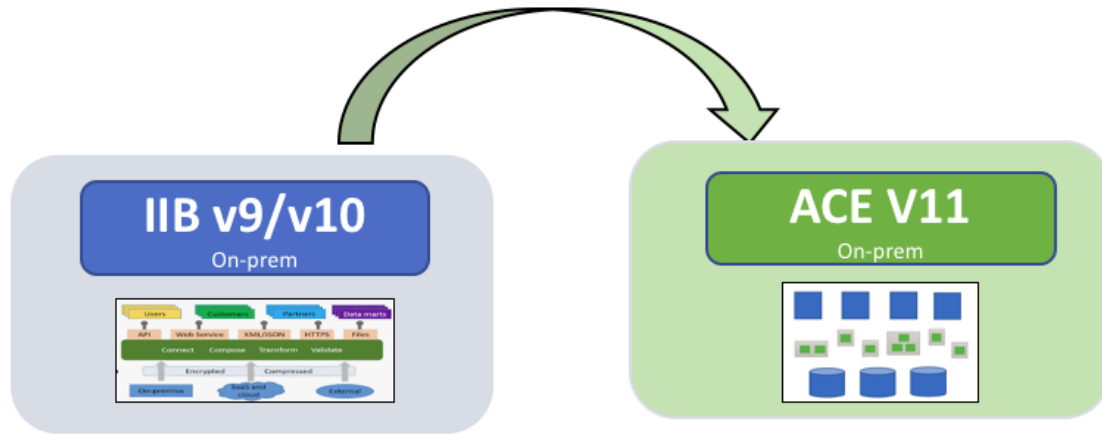
Refactor: Import existing PIs to V11 Toolkit, redesign flows as necessary, create policies, create new BARs and deploy

Replatform: Deploy the BARs on V11 supported platform

Deploy to the standalone integration server (SIS) or integration node, integration server architecture

as-is: Deploy existing BARs to ACE V11

## mqsibbackupbroker & mqsixtractcomponents



Option 2 – When source code is not available

BAR files/Message flows projects, config services NOT available

Take a backup of the IIB V9/V10 integration node using the mqsibbackupbroker command

Move the backup to the desired ACE V11 system

Use the mqsixtractcomponents command to perform migration

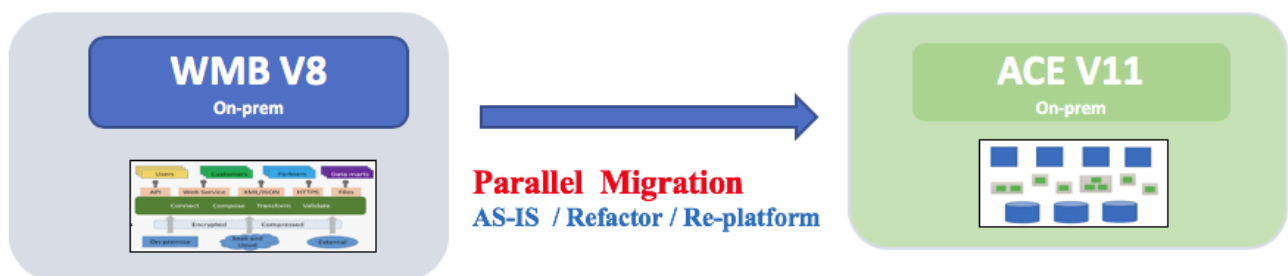
Extract to the standalone integration server or integration node, integration server architecture

The msgflows with discontinued flow nodes will not migrate

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## WMB V8 to ACE V11

Migration Approach – WMB V8 to ACE V11



Option 1 – When source code is available

BAR files/Message flows projects, config services etc. available

### Parallel Migration

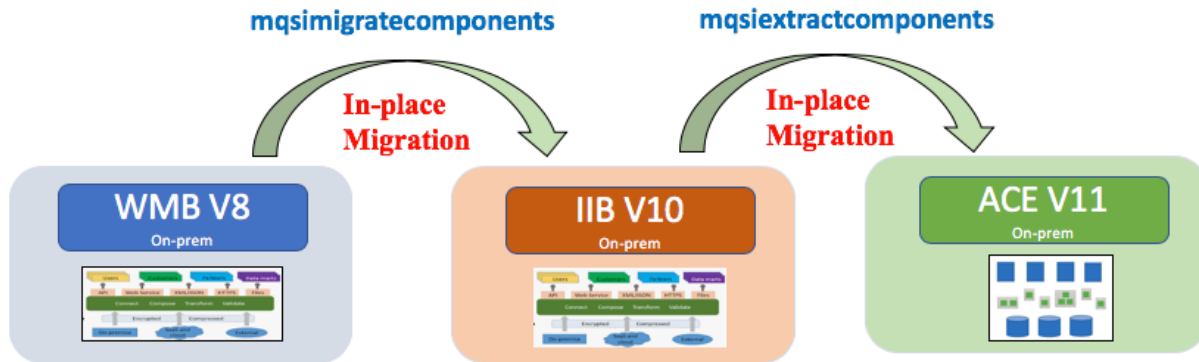
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Refactor: Import existing PIs to V11 Toolkit, redesign flows as necessary, create policies, create new BARs and deploy

Replatform: Deploy the BARs on V11 supported platform

Deploy to the standalone integration server or integration node, integration server architecture

as-is: Deploy existing BARs to ACE V11



### Option 2 – When source code is not available

BAR files/Message flows projects, configservices etc. NOT available

Perform in-place migration from V8 to V10 using `mqsigratecomponents` command

Take backup of V10 Node and move it to V11 System

Use `mqsixtractcomponents` command to perform migration

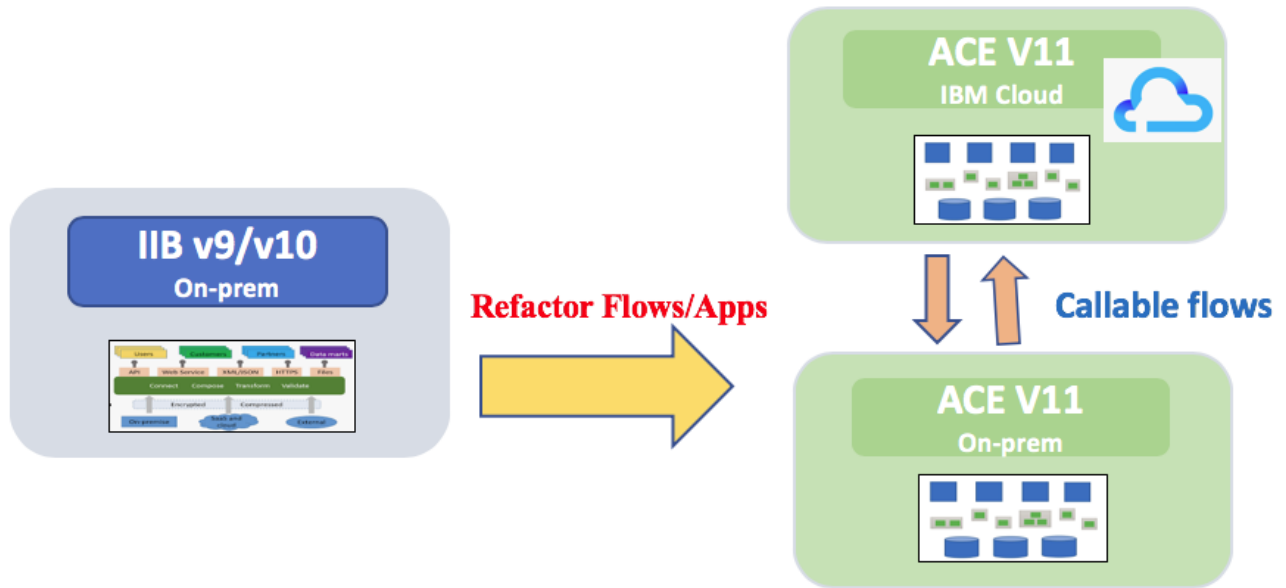
Extract to the standalone integration server or integration node, integration server architecture

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## Moving on-prem workload to IBM Cloud (Managed service)

### Migration Approach – moving workload to IBM Cloud (Managed service)



### Recommended Topology – Hybrid deployment

Moving parts of the integration to cloud while retaining some on-premise closer to enterprise systems. These two deployments can seamlessly talk to each other using a purpose built Switch server & callable flow technology.

### Refactor existing Apps based on the following:

Refer to IBM Knowledge Center to learn which features/functionality/nodes are not available in the Cloud. Keep such flows on-prem.

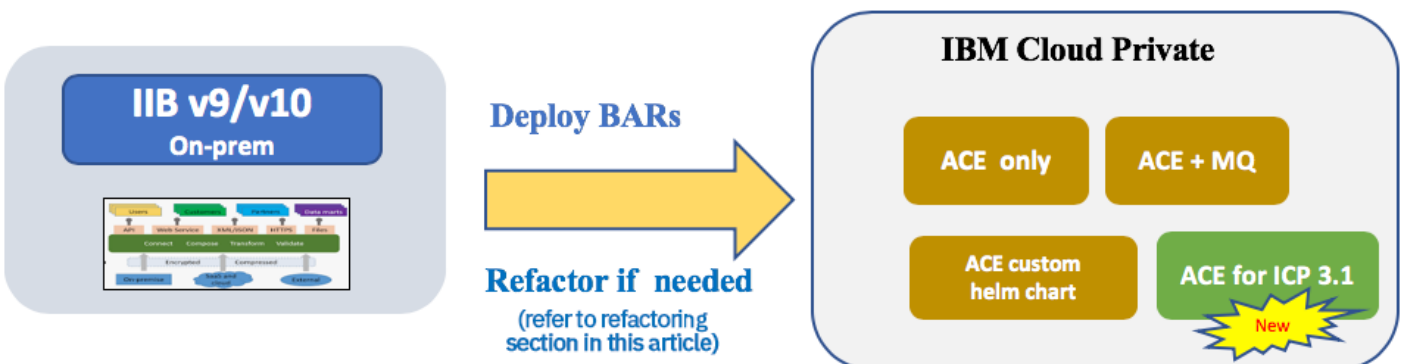
Flows that heavily depend on on-prem data (local files/ backend DBs etc.) and require high performance, low latency should be deployed on-prem.

Use callable flows to get the data from on-prem system.

Use a phased approach to move workload from On-Prem to On-Cloud.

## IIB V9/V10 to ACE V11 on ICP

### Migration Approach – IIB V9/V10 to ACE V11 on ICP



## Option 1

You can deploy your existing BAR files using the ACE dashboard on ICP 3.1 → [\(Recommended\)](#)

## Option 2

You can also create your own Docker image or Helm charts for ACE using templates on ot4i

<https://github.com/ot4i/ace-docker>

<https://github.com/ot4i/ace-helm>

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# Refactoring

## When do I need to refactor?

Behavioral changes between source and target versions – [Refer to this Knowledge Center link](#)

Deprecated/discontinued nodes – [Refer to this Knowledge Center link](#)

Reduced OS Platform coverage – needs re-platforming

Integration node vs standalone integration server (SIS) deployment topology

Independent projects – need to be converted to Application Projects in ACE

Fine grained deployment – restructure BAR files

Hybrid Integration Scenario – interfacing with SaaS apps

## Benefits of refactoring

While your existing Apps might work as-is on ACE V11, you may want to consider refactoring your Apps where possible for:

Enhancing productivity

Agility to deploy new changes

Modernisation of Apps.

For example:

Enhance existing applications to take advantage of newest features like RESTAPI projects to expose webservices based flows as APIs, use callable flows for hybrid integration, in-memory aggregation etc.

## A few additional points to consider if refactoring to deploy to ACE on ICP

MQ affinity – Do you require local MQ or can you connect via the MQ client connection?

By regrouping flows in the BAR file, you can spin up 'ACE only' images for non-MQ based flows, which means a smaller footprint of the container and less moving parts and thus easier to maintain

Group related services together

Deploy critical services or high volume services in its own integration server for independent scaling

Is persistence of the data required? If yes, persistent volume and PV claim will need to be configured

## Parallel Migration

You can use parallel migration to perform a staged migration process by creating a new Version 11.0 integration node to run in parallel with your existing integration node. You can then migrate your application logic from your existing integration node to your new integration node.

### Advantages of Parallel Migration

You don't need to stop your existing brokers during migration

You can migrate to any hardware or computer

Code changes can be made in parallel with migration to take advantage of new features in the product

You can choose which components to migrate in a controlled way

You don't need to stop your existing brokers during migration

You can make changes to your client configurations