

## Best Practices for Creating New Namespaces and Databases

Keep in mind the following best practices when creating new namespaces and databases to support your application:

- Use meaningful and consistent naming conventions to make it easy to identify the purpose of each namespace and database.
- Implement robust access control by defining appropriate roles and permissions for each database.
- Always put application databases on separate storage, never inside the installation directory or on the same volume as the operating system.
- Enable database encryption during database creation if policies or regulations require this additional level of protection. Note that this can be done after creation, but it may require downtime proportional to the size of the database.
- Create multiple databases for each namespace to separate different kinds of data. For example, you may want to separate transient data like interoperability messages from more persistent data. Also, consider splitting out code and configuration data for each interoperability production within your instance.
- Consider using multiple smaller databases to improve speed when performing common operational tasks like copying the files between systems.
- Consider whether automation options like Configuration Merge or APIs would be better than manually creating your databases and defining the mappings.
  - When you are creating many databases, using automation can speed up the process significantly.
  - You can use scripts to create a database that fits your requirements; these act as documentation for the database and allow for reproducibility.
- Once you have created your database, consider the next steps:
  - How will you back up the database, and how often will you run integrity checks?
  - What are the functional and physical size limits for your databases, and how will you monitor and plan for database capacity?