

## Setting up a multiuser Enterprise Architect (EA) project

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This document provides some general notes on items that should be reviewed when setting up a multi-user project in EA. It is provided as a set of notes and should not be considered as complete since each project is different and have its specific needs.

### Repository

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There are several choices of the database for an EA project. The choices include:

- A single EAP file – located on a shared drive
- A single EAP file set up as a Master/Replica – where users work on replicas (ideally in different areas) and the model manager will frequently sync in replicas, and then updating users with a new replica
- A shared multiuser database – mySQL, SQLServer, Oracle – and to which all users have shared access

Whatever the choice it is important to:

1. Ensure the database is safe - both in terms of resilience (backup at the file level) and security (compliant with required security standards - which may require suitable levels of encryption).
2. Implement user security so that areas within the model can be allocated to the different users and locked to prevent accidental changes being made, with the resulting reconciliations (can be hard to find!)

### Model

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In setting up and using the model important to establish rules associated with its use and the way that items will be modelled. The following are key:

- Establish a metamodel – that describes the types of things that are modelled, how they are to be modelled and hence will define the elements, usage, etc. This is vital otherwise it is easy for users to model stuff in different ways which can lead to some challenging rework.
- Conventions – not part of the meta-model but equally important are the conventions that will be employed, and without which the model can become inconsistent and difficult to understand. This should cover, but is not limited to:
  - Package structure
  - Elements – use of composites
  - Use of diagrams, titles,
  - Naming conventions
  - Documentation standards e.g. each package must have a description, note for elements
  - Namespaces
- Reference data – to support the conventions and metamodel it is useful to establish reference data that is used by all. These will include:
  - Stereotypes
  - Tagged Value types (not it may be that these are established through tagged value templates)

- General types – to ensure that the terms available align with those used in your environment
- Code engineering datatypes – if you are planning on generating code from the model
- Database datatypes - if you model references databases
- Images – if you want the model to use specific common images

As well as

- Authors
- Roles
- Glossary
- Project specific data. As part of helping ensure consistency of modelling and to ensure key information is captured it is useful to establish
  - Essential Tagged Values – and build them into the model (before starting use)
  - Setting database types if a specific database is to be used
  - If the project will aim to generate code it is important to ensure that
  - Paths/directories are configure so that they are portable through the use of “Local directories and paths”
  - Code engineering datatypes

## Model management

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It is essential to have a designated Model Manager/Administrator. It may be that this role is split between a “Model technical authority” who is responsible for the model, the modelling, its quality, etc and a “Model administrator” who is responsible for:

- User management – to prevent accidental damage it is recommended that for multi-user projects EA security is enabled.
- Sync of master/replica if used
- Establishing and maintaining a backup of database

## Auditing

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If you wish to monitor changes to a model at a low level then it is possible to enable auditing. If you feel that this is needed refer to the EA documentation for more details.

## Personal tasks

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Depending on the nature of the project it MAY be useful to use the personal tasks. Found not to be very useful outside of the immediate development team but could be used to capture tasks associated with elements of the model.

## How to's

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This section provides some more information on some of the items mentioned in the check list. Further details are provided in the EA User Guide.

### Set up user Security

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To enable security "Project | Security | Enable Security".

After this is done then the Administrator should set up users, groups, locks.

The setting of these should be reviewed and agreed - then documented as below - to allow the individual groups to be configured accordingly.

Permission	Enables the user to	Admin	Power	Approver	Support	Reviewer	Product
Administer Database	Compact and repair project database.	X					
Audit Settings	Change the audit settings in the Audit Settings dialog.	X					
Audit View	Enable auditing and display data in the Audit View and Audit History tab.	X	X				
Baselines - Manage	Create, delete, import and export Baselines.	X					
Baselines - Restore	Merge data into the project model from a Baseline or XML file.	X					
Change Password	Change your own password or (Administrator) another user's password.	X	X	X	X	X	X
Check Data Integrity	Check and repair project integrity.	X	X				
Configure Datatypes	Add, modify and delete datatypes.	X	X		X		
Configure Images	Configure alternative element images.	X	X				
Configure Packages	Configure controlled packages and package properties.	X	X				
Configure Resources	Create and manage Resources window items: RTF templates, patterns, profiles, favorites.	X					
Configure Stereotypes	Add, modify and delete Stereotypes.	X	X				
Configure Version Control	Set up version control options for the current model.	X					
Export XMI	Export model to XMI.	X	X				
Generate Documents	Generate RTF and HTML documents from model	X	X	X	X	X	X

	packages.						
Generate Source Code and DDL	Generate source code and DDL from model element. Synchronize code against model elements if it already exists.	X					
Import XMI	Import model from XMI.	X					
Lock Objects	Lock an element or package.	X	X		X		X
Manage Diagrams	Create new diagrams, copy existing and delete diagrams. Also save diagram as UML Pattern.	X	X		X		X
Manage Issues	Update and delete Issues.	X	X		X		X
Manage Project Information	Update and manage resources, metrics, risks.	X					
Manage Reference Data - Update	Update and delete reference items.	X					
Manage Replicas	Create and synchronize replicas.	X					
Manage Tests	Update and delete Test records.	X					
Reverse Engineer from DDL and Source Code	Reverse engineer from source code or ODBC, and synchronize model elements against code.	X					
Security - Enable/Disable	Disable user security in Enterprise Architect.	X					
Security - Manage Locks	View and delete element locks.	X	X	X	X		X
Security - Manage Users	Maintain users, groups and assigned permissions.	X					
Spell Check	Spell check package and set spell check language.	X	X	X	X		X
Transfer Data	Transfer model between different repositories.	X					
Transform Package	Perform transformations of packages and elements.	X					
Update Diagrams	Update diagram appearance, properties and layout, including the Page Setup dialog.	X	X	X	X	X	X
Update Element	Save model changes (including delete) for elements, packages, and relationships.	X	X	X	X		X
Use Version Control	Check files in and out using version control.	X					

With Access Control enabled the administrator can set up the locks and /or leave some of this to the users.

Care needs to be taken when using the Master / Replica approach to ensure that the replica has been configured with access locks before it is distributed.

Working draft

As the model development progresses the locks will change and these will need to be checked as part of the model management function.

### Creating "Tagged Values" in templates

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To create tagged values in each newly created element:

1. Create a package in your model named "Template Package" (the name isn't actually important, but you might as well name it for what it does).
2. Create a diagram and drop an Object and a Component onto the diagram.
3. Give the Object and Component the tagged values that you want all Objects and Components

### Autonumber on

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Each element can be numbered automatically when created. The number can either be a prefix and/or set in the alias for the element.

It is recommended that the "alias" method is used unless this is being used for another reason that would preclude that.

To enable autonumber select "Settings | Auto Name Counter" and then chose the type for which the counter is required.