Archi - ArchiMate Modelling

What’s New in Version 2.0

Important Note

It is always a good idea to make backup copies of your data before installing a new version of Archi. Whilst we make every effort to test the software and check for bugs we cannot guarantee that bugs do not exist in the application nor that your data might be affected by changes in this version of Archi.

Please backup your data first!

New Features

- Dynamic Viewpoints
- Can now add multiple occurrences of objects and connections in a View
- Elements can have circular relationships and connections (self <---> self)
- Support for exporting with Jasper Reports
- Palette is now detachable and improved
- A View can be maximised to Full Screen
- Support for Mac OS X Lion Application Full Screen
- Can now launch Archi from *.archimate files from the Desktop on Mac OS X
- Export View to Bitmap (*.bmp) format now supported on Mac OS X
- Group objects now have a "Documentation" field
- Group objects can also be added to Sketch Views
- Group objects and all Sketch View diagram objects now have Properties
- Added a "Name" field to Sketch Stickies
- Added "Name" and "Documentation" fields to Sketch Connections
- On Linux default to use Webkit Browser component in the Hints window
- Added tooltips for all Sketch View elements
- When adding a new model in the Model Tree the focus is put on in-place editing so you can edit its name
- Added a preference to use curved or square tab style
- "Archisurance" example updated to include Viewpoints and re-organised folders
- The Java version shipped with the Windows installer is now version 1.6.0_26
- Built on Eclipse 3.7.1 RCP

Fixes

- When closing a model close any of its open Views more gracefully
- Optimisations to Property sections in Properties Window
- Many internal optimisations

Review of the Main New Features

Dynamic Viewpoints

The ArchiMate Specification states that "...architects and other stakeholders can define their own views on the enterprise architecture. Viewpoints define abstractions on the set of models representing the enterprise architecture, each aimed at a particular type of stakeholder and addressing a particular set of concerns. Viewpoints can both be used to view certain aspects in isolation, and for relating two or more aspects."

In practice, a Viewpoint is a sub-set of elements and relationships. Archi allows you to specify the following Viewpoints:

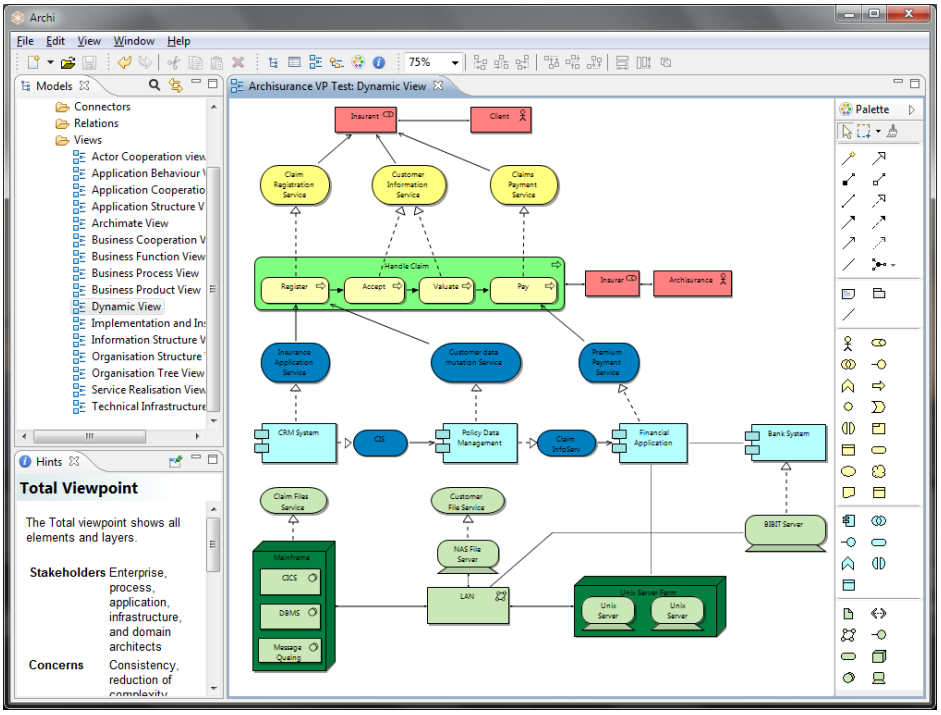
- Actor Co-operation
- Application Behaviour
- Application Co-operation
- Application Structure
- Application Usage
- Business Process
- Business Process Co-operation
- Implementation and Deployment
- Information Structure
- Infrastructure
- Infrastructure Usage
- Organization
- Layered
- Product
- Service Realization
- Total

When creating a new View in Archi, the default Viewpoint is set to "Total", meaning that all elements from all layers can be added to the View. Setting a Viewpoint on a View means that a sub-set of elements is available to place on the View. Some other ArchiMate authoring tools require you to specify the Viewpoint in advance when creating the View. Unfortunately, this means that you cannot change your mind should you wish to later change the Viewpoint in the View. Archi, however, implements **Dynamic Viewpoints** so that you can change the Viewpoint at any time and those elements that are not permitted for that Viewpoint are either "ghosted" out or hidden. Dynamic Viewpoints allow you to change your mind. You don't have to decide up-front what the Viewpoint will be. You can experiment with different Viewpoints for the same View. And if you decide to keep the Viewpoint, you can simply remove any disallowed elements from the View. You could even set up one master View and apply different Viewpoints in a "what if" scenario.

Setting the Viewpoint

To set the Viewpoint for a View, open the View in the View editor and select the required Viewpoint from the main "View->Viewpoint" menu, or by right-clicking on the View's drawing area and selecting it from the context menu. You can also change the Viewpoint from the View's Properties window.

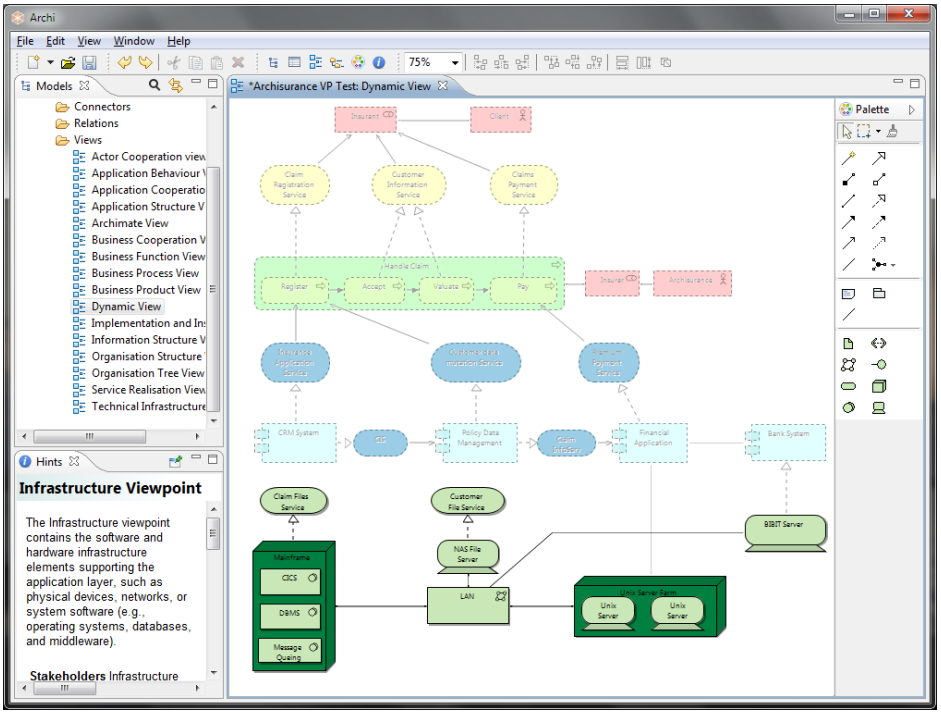
In the following example we start with a View that has the default "Total" Viewpoint:



A View with the "Total" Viewpoint

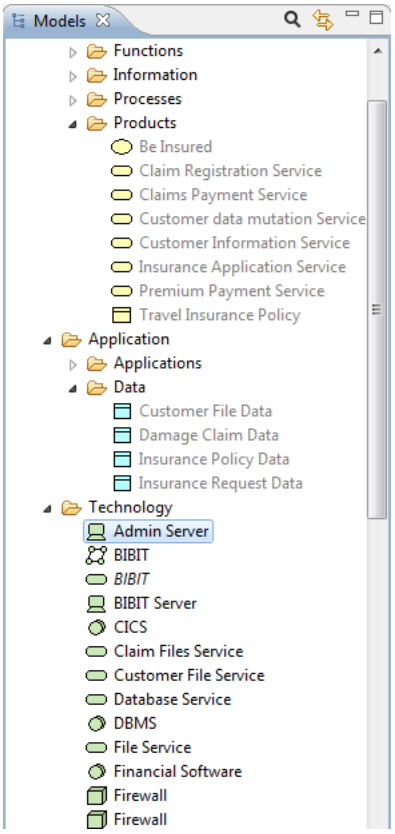
Notice that all elements from all the ArchiMate layers (Business, Application, and Technology) are displayed. Also, the Palette has all elements available.

If we now change the Viewpoint to "Infrastructure" then any elements that do not belong in this Viewpoint are "ghosted" out in the View. Notice, also, that only the elements permitted for the current Viewpoint are available in the Palette, whilst the others are not available:



The same View with the "Infrastructure" Viewpoint

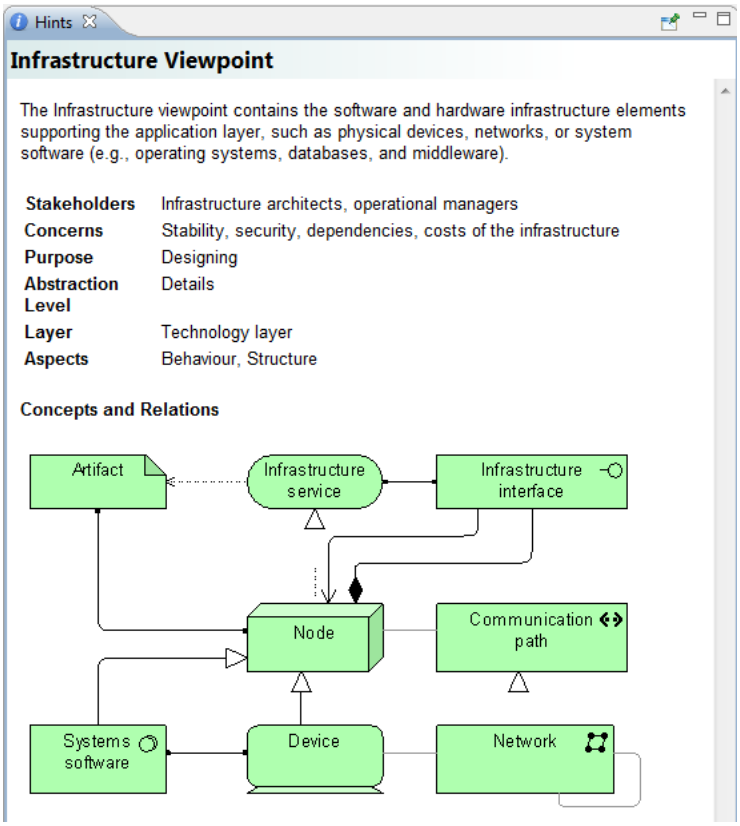
If we look at the elements in the Models Tree we can see that non-permitted elements for the Viewpoint are greyed out:



Elements not permitted for the Viewpoint are greyed out

If we choose to, we can drag and drop any element from the Models Tree to the View but the resulting element in the View will be greyed out. This means that we can work with the Viewpoint any way we want to but we are reminded at all times of what should and shouldn't be added to the Viewpoint.

If you are unsure of the constraints for a Viewpoint select it then open the Hints Window. A full explanation is available for the Viewpoint:



A Hint for a Viewpoint

Preferences

If instead of "ghosting" the non-permitted elements we wish to completely hide them we can do so in Preferences.

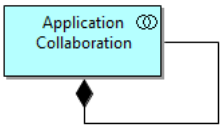
Add multiple occurrences of objects and connections in a View

It's now possible to add the same element or connection more than once in a View. Prior to this version of Archi this was a limitation. Dragging the same element to the Models Tree to the View is now unlimited with all attached connections also being automatically added.

Having the same element in a View means that in complex and large views you can avoid cluttered Views when there are multiple connections from elements. In large Views you may wish to connect an element to another element that is positioned on the other side of the View. This can lead to connections being drawn through the whole View. In some cases rearranging the elements in the view can help, but in complex views this is not always possible, Allowing elements to occur multiple times in a view is a useful way to present the element in different aspects.

Elements can have circular relationships

You can now add a circular relationship (connection). This is a relationship whose target and source element is the same. By default, this option is turned off in Preferences. Enabling the preference will allow you to draw a connection from an element to itself by selecting the required relationship from the Palette, clicking once on the element and clicking again on the element:

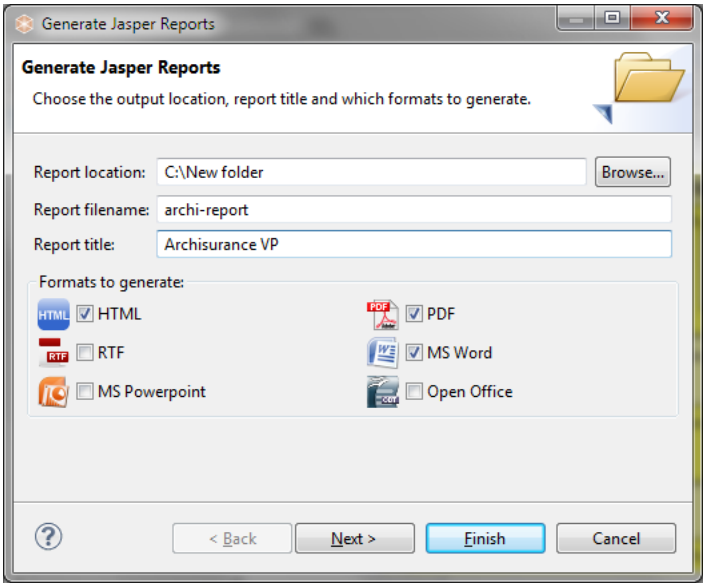


A circular relationship

Support for exporting with Jasper Reports

Jasper Reports is the world's most popular Java reporting engine. Combine data sources and produce pixel-perfect documents that can be viewed, printed, or exported into a variety of document formats with this powerful reporting tool. Archi can export models in various formats using Jasper Reports Templates.

This option is available from the "Report->Jasper..." menu item from the main "File" menu. Once a model is selected in the Model Tree or in a View this menu item is enabled. Provide the details in the following wizard:

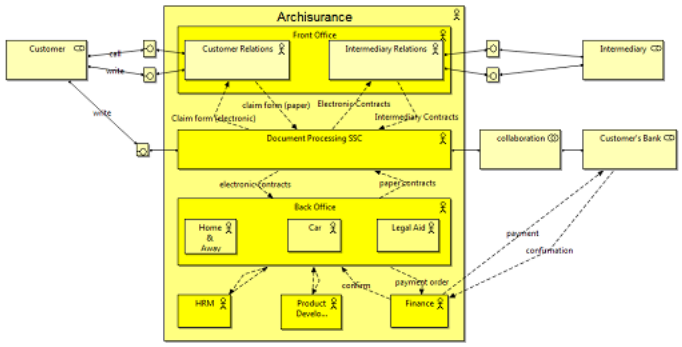


Jasper Reports wizard

The following is an example of a PDF format report:

Actor Cooperation view

Actor Cooperation viewpoint



Documentation

The Actor Co-operation viewpoint focuses on the relations of actors with each other and their environment. A common example of this is the “context diagram”, which puts an organization into its environment, consisting of external parties such as customers, suppliers, and other business partners. It is very useful in determining external dependencies and collaborations and shows the value chain or network in which the actor operates.

Another important use of the Actor Co-operation viewpoint is in showing how a number of co-operating business actors and/or application components together realize a business process. Hence, in this view, both business actors or roles and application components may occur.

Properties

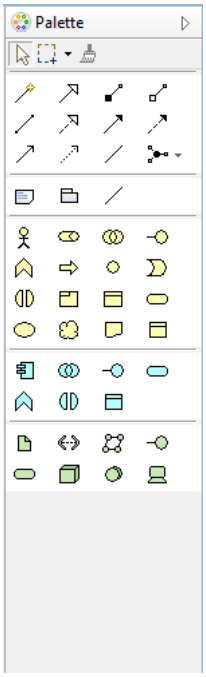
Metrics:	Human Interface
Conditional:	Actors, Behavioural
Goal:	Show the level of interaction in usage of Actors

Part of a Generated Jasper Report in PDF format

Developers can design their own templates in *.jrxml format.

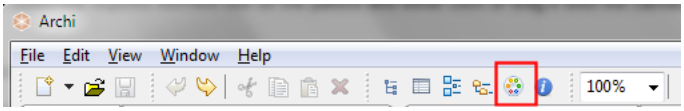
Palette is now detachable and improved

A useful setting is to display the Palette with "Icons only" in order to see all available Palette tools:



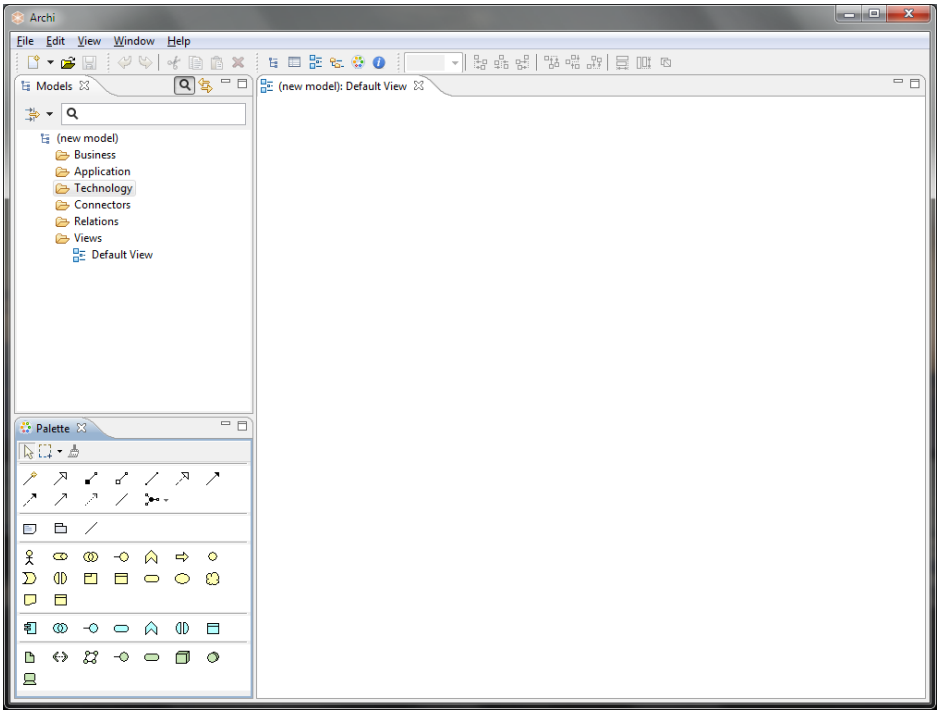
The Palette displaying as "Icons only"

By default, each View has its own attached Palette. It is also possible to have a single, detachable Palette that you can drag and dock to any position in the application window. To do this, click on the "Palette" button on the main toolbar:



The "Palette" button the main toolbar

Pressing this button detaches the Palette from the View and creates a Palette window. You can drag and dock this to anywhere in the application space. The following example has the Palette docked in the lower left corner:

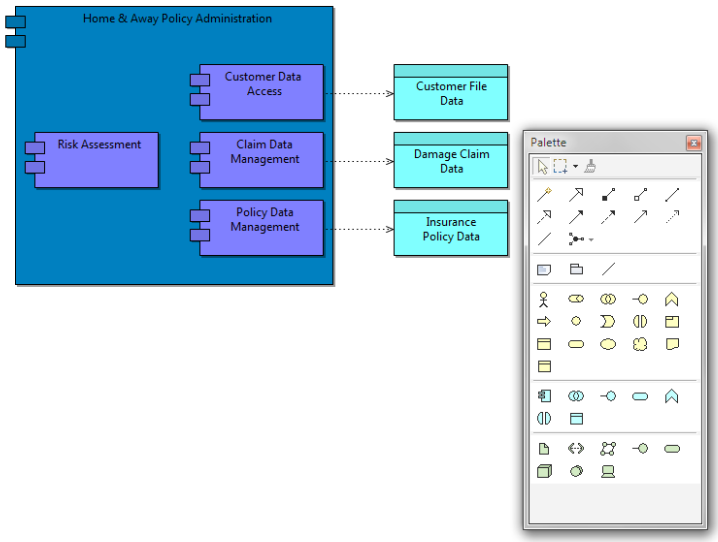


The Palette window docked in the lower left corner

Closing the Palette window re-attaches it to any open Views.

A View can be maximised to Full Screen

A View can be displayed and edited in Full Screen mode. This can be useful to maximise the View for presentation purposes. To do so select a View and press the F11 key on Windows or the Shift-Command-F keys on Mac, or choose the "Full Screen" menu item from the main "View" menu. The View will be maximised:



A View in Full Screen mode

The Palette is of the "floating" type and may be closed with the Escape key or the window's close button. Right-clicking on the View brings up a context menu where the Palette may be shown if it is not currently visible.