GeneXus Cloud Deployment Services

Concepts about the complete solution for application deployment

GeneXus™ 16

GeneXus offers a new set of products and services called GeneXus Cloud Deployment Services to provide a comprehensive solution to the deployment issue.

This solution provides a set of deployment services in which the user chooses the provider, and the plan. Users can also hire help for the initial configuration.

In addition, it provides automatic deployment of the application to the selected platform and a tool that automatically solves the production and version management.

Production environments are always taken into account, so that the application is always available to end users.

The first advantage is that the GeneXus Cloud team will help you prepare and build your production environment.

When you upload a solution to the cloud, there are many questions to answer. Who selects the environment, how and in what cloud? There are many things to consider because providers offer a wide variety of services and possibilities, so a certain level of experience is required to know what to choose.

We are in frequent contact with different providers, so we can offer several options of prices and services, as well as putting you in touch with these providers. You select your preferred option and we get everything ready (or help you do it) for your cloud environment.

If you do not wish to purchase GeneXus' service to build the environment, in our wiki you will find detailed instructions to do so, as well as the necessary information at: https://wiki.genexus.com/commwiki/servlet/wiki?30904

Remember that we help you get your environment ready. And you have total control over it; we simply provide support and help you get started.

An important clarification, as we always mention that we help to set up the deployment environment in the provider, does this mean that it can only be done by GeneXus staff? No, the wiki provides step-by-step instructions so that anyone can do it. As we've said before, GeneXus offers a service that helps you select the most suitable plan for your needs (machine, memory, etc.), helps you install everything in the PAAS and then offers a maintenance service of the various deployments. Obviously, this has a cost. Although it is not a significant cost, GeneXus S.A. charges this service of consultancy and assembly, and also maintenance. However, users can do everything on their own and save this money, by following the instructions provided in the wiki. Don't forget that you will have to pay for the cost charged by the PAAS provider for the hosting service.

GeneXus Cloud Manager

- Deployment versioning
- Traceability
- Reverse mechanisms

Now, how do you achieve control over versions and reversion mechanisms?

With a central component called GeneXus Cloud Manager, which contains the knowledge of all the deployments that were carried out.
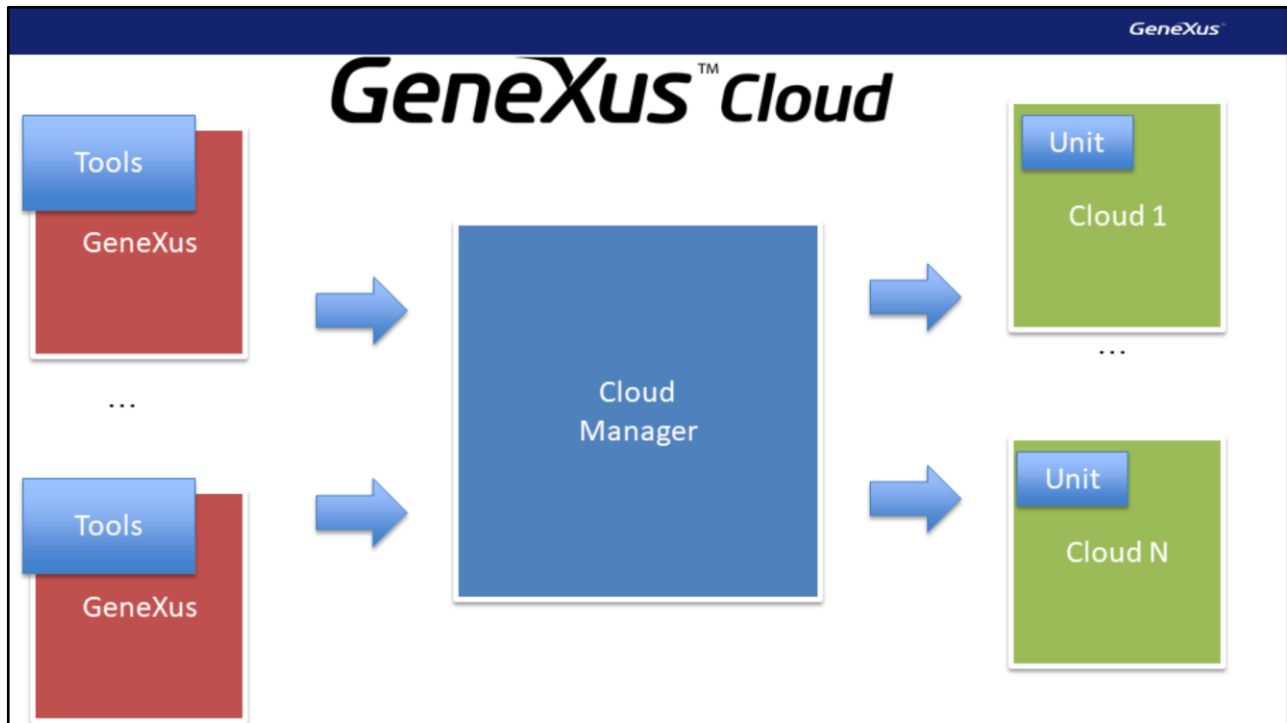
Its architecture is as follows: GeneXus now includes the new F6 command in the IDE to deploy applications in an interactive manner, and also some MSBuild tools have been added to make deployments on a scheduled basis, or in batches.

There is also the GeneXus Cloud Manager, a website containing the entire knowledge about deployments and set of web services to manage them.

Pressing F6 sends the binaries to the Cloud Manager, which then sends them to the various clouds that we have configured. By pressing F6 again, the Cloud Manager calculates the differences and knows what updates must be made in each case. Also, it remembers who sends the deployments to maintain their traceability.

And thirdly, there are components in the cloud that help deploy applications (for example, they know how to create a site).

Now we'll see some images from the GeneXus Cloud Manager website to show its power more clearly.

Here we can see a screen where we appreciate the cloud used and the registered user.

We see the published applications catalogue. For each application, you can see the data of the URLs used, when the application was created, what deployment is active (its status), who updated it and when, and from what knowledge base.

Also, several operations can be performed on the application.

History

| DASHBOARD | | | | | TERMS HELP | v 1.7.521 |

CLOUDS
GeneXus SA

USERS
armin

| Applications | Deployments History | Databases | Targets | Activity Details |

TakeAll

Main

Restore | Log | Diff | Close

Deployment	Creation	Status
Deployment # 11 (Active)	**06/16/16 10:30 PM**	**Success**
Deployment # 10	06/16/16 10:08 PM	Success
Deployment # 9	03/15/16 08:15 PM	Success
Deployment # 8	03/15/16 08:02 PM	Installation with errors
Deployment # 7	02/29/16 06:33 PM	Installation successfully deployed to all instances
Deployment # 6	02/29/16 06:22 PM	Success
Deployment # 5	02/29/16 06:18 PM	Success
Deployment # 4	02/24/16 10:57 PM	Success

An available option is to see the history of the application. This includes the deployments performed and which is the active installation.
There are also actions to be carried out on these deployments.

Logs are available to find out what happened on a specific update.
In this case, we're reading the record of the last deployment, and we can see all the steps carried out in this deployment.

Diff
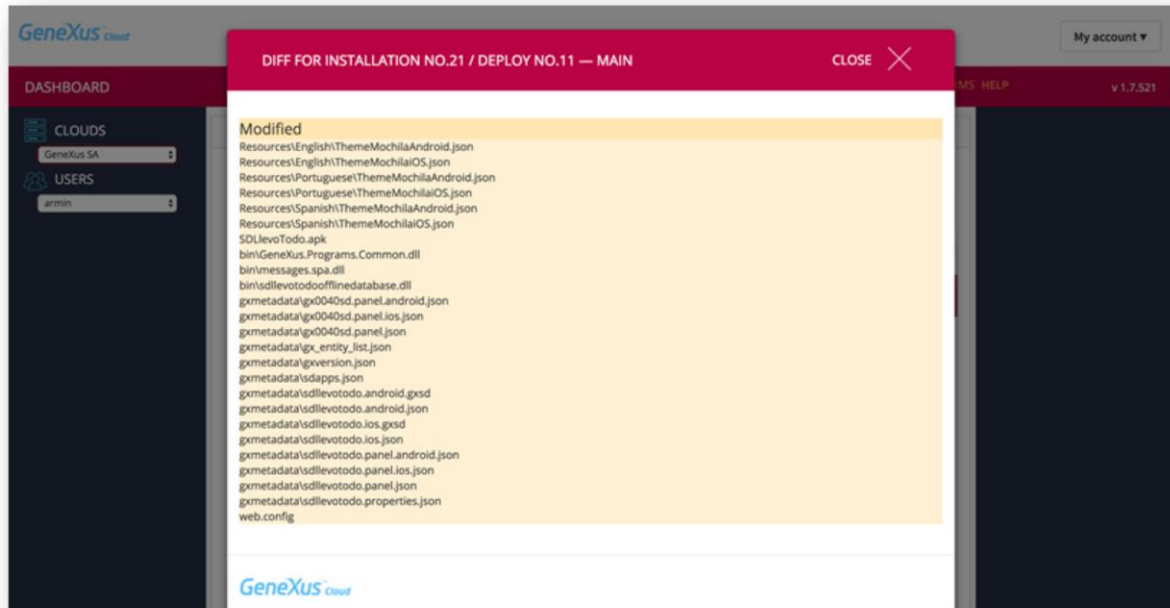
Something very interesting is that you can know what was updated between one version and the other.
You can see the differences between two deployments, such as differences between binaries (dlls) or resources (jsons), that let us know where the problem is if something doesn't work after the last deployment.

GitHub is used to store all this information, branching and versioning everything.

Restore Version

Something interesting to keep in mind: an app can be published successfully, but 5 minutes later you realize that you've made a mistake. Instead of going back to GeneXus and undoing the change, you can solve it from here in a few seconds: just by clicking on the Restore button and activating the deployment you want. This can only be done if there weren't any reorganizations between those versions.

These options significantly reduce the stress associated with publishing a new version.

The next deployment from GeneXus takes into account the active version in production and makes the deployment against this active version. This means that it won't calculate the differences with the latest implementation, but with the version that is active at that moment.

Because this follows a formal process, you always have control over what is happening and it is possible to undo the changes if something is not working properly.

Databases catalog

Because applications connect to databases, a catalog of the databases that were created, their backups, and what applications those databases use is available.

You must know this when making a backup or reorganization. Now we know who will be affected when we make the changes.

Tools have "daemons" that automatically run incremental or full backups, depending on the agreement signed.

For more information about GeneXus Cloud Deployment Services:

https://wiki.genexus.com/commwiki/servlet/wiki?28935

Videos   training.genexus.com
Documentation   wiki.genexus.com
Certificactions   training.genexus.com/certifications