

Application Deployment Tool

More on how to deploy applications in GeneXus

GeneXus® 16

An introduction has already been provided to the Application Deployment Tool, which is accessed from the IDE by selecting the Build menu, Deploy Application option.
We will now look in more detail at the options provided by this tool.

The application deployment tool allows you to:

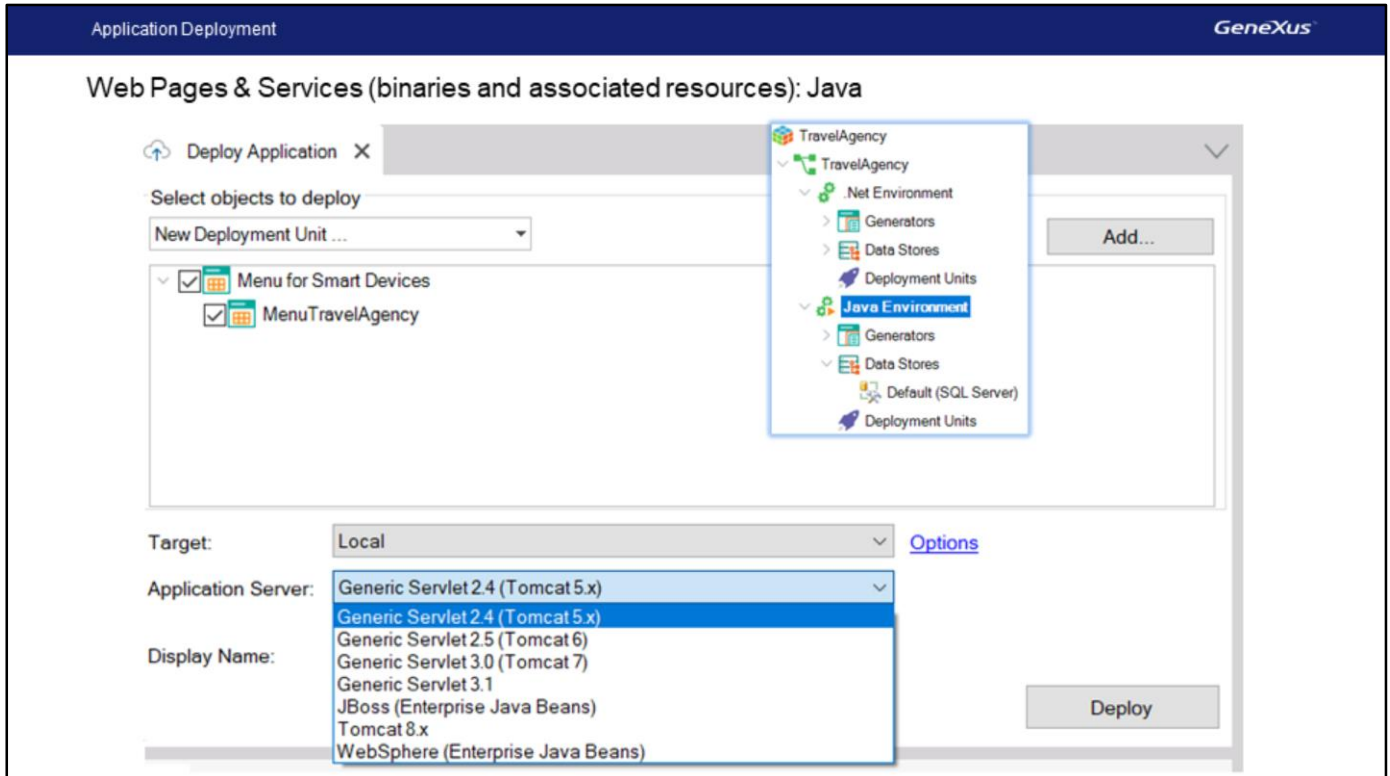
- Create Packages for .NET and Java
 - Web pages & services
 - Command line procedures
- Deploy to PaaS providers
- Deploy to Docker image

In the GeneXus 15 IDE, below Build / Deploy Application, there is a new feature that helps to assemble .NET and Java packages (WARs).

This includes all the components to be sent to the web server, such as web pages or web services, with their associated resources and also procedures that are executed by command line.

In addition to packaging, the tool includes a wizard to transfer and publish those packages to the most popular cloud providers.

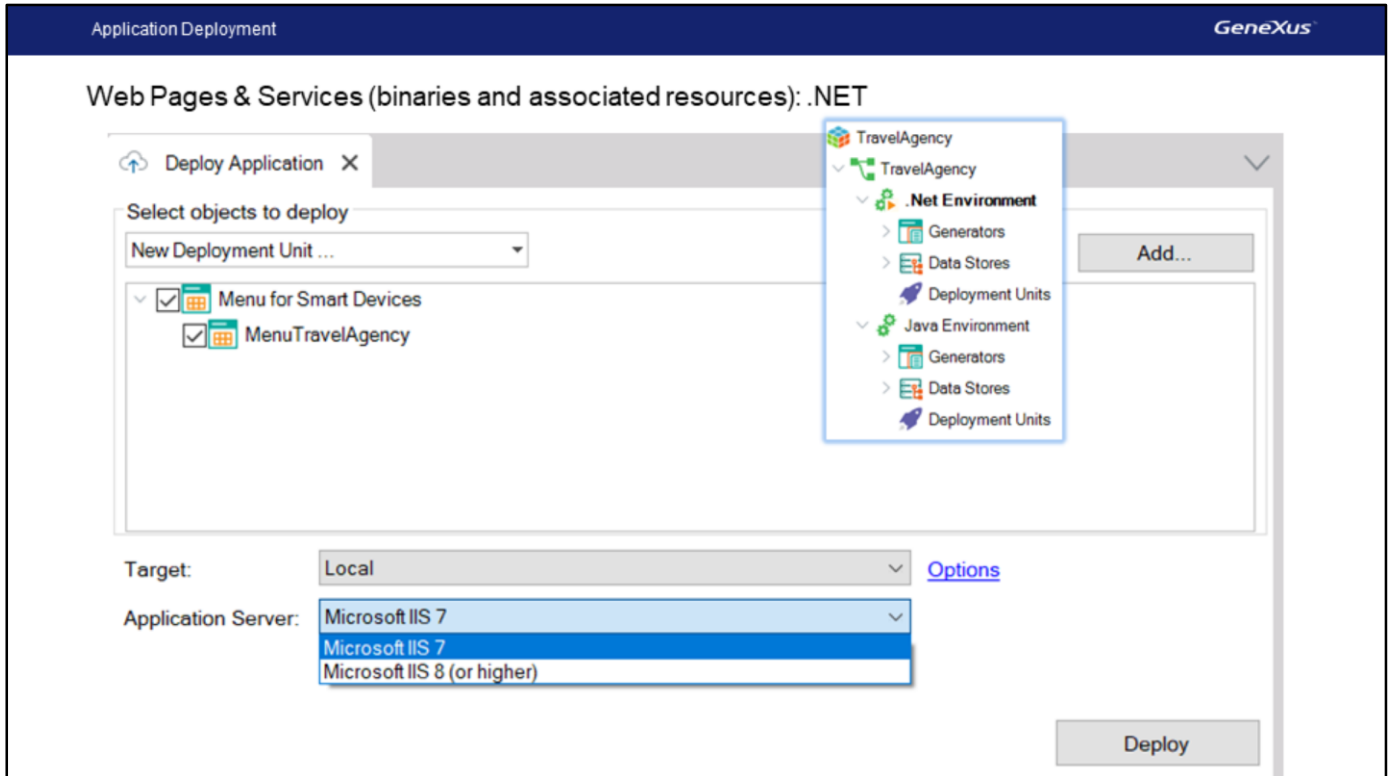
It is also possible to create a package and transfer it to a Docker image.



Here we see the window to deploy the application. For an object to be included in the package, dragging it to the deployment window is enough. If a main Web Panel is dragged, for example, the package will contain all the binaries and resources associated with that web panel, as well as all the objects invoked by it. You can also include objects that are not main.

If a main SD Panel is selected, the package will also contain all associated services on the server (REST services, resources, etc.).

The package is assembled according to its destination; if it is local, it will depend on the Application Server. The available application servers will be those that match the active environment. In the slide you can see the application servers for the case of a Java environment.



Now we're looking at a .NET example.

The assembled package varies on a case-by-case basis. If a Java procedure executed by command line is to be deployed, the result is a .jar file. If it is web Java, a .war file is generated. If it is .NET, the result is a folder that can be compressed to move it to the production server.

The folder or war is created in a folder below the environment/deployment directory. The specific directory is indicated in the GeneXus output.

What happens if I have a Windows application? If my application is a Windows app, can I use the Deploy Application option and drag the Windows object that is main?

No, this tool is only available for the Web environment. What's more, when we drag an SD object that has been configured as main, the SD application is not packaged. Instead, the web resources are uploaded; that is, the rest services used by that SD application are uploaded to the web server. Also, remember that GeneXus 15 doesn't generate Windows applications.

In addition to Web applications, it is possible to deploy rest or soap services and main procedures that are executed by command line.

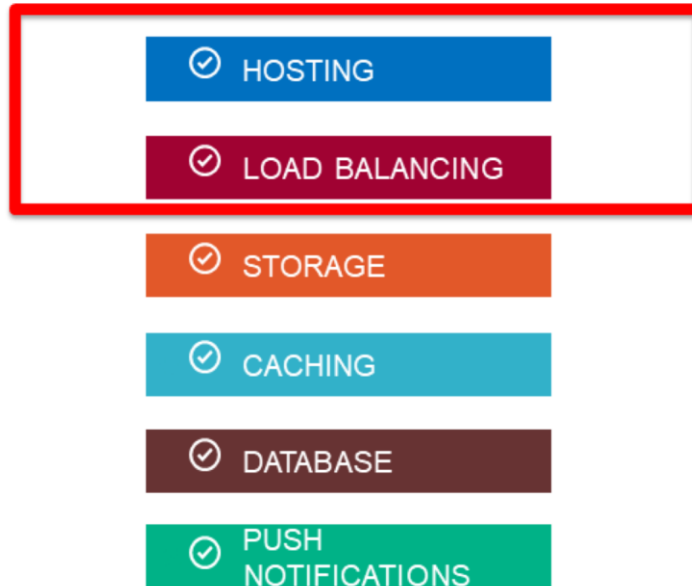
Deployment to PaaS (Platform as a Service) servers



Cloud service providers (especially those that provide Platform as a Service) have standard mechanisms through which applications are published in the corresponding environments.

GeneXus 15 allows direct publication in: AWS, Google, IBM Bluemix, Microsoft Azure, and SAP Hana Cloud Platform.

Deployment to PaaS (Platform as a Service) servers



From the Build/Deploy Application window, when you change the combo box value of the destination from Local to one of the providers, binaries and web resources are deployed to the hosting environment.

Deployment GeneXus

Deployment to PaaS servers in Java environment

Deploy Application ×

Select objects to deploy

New Deployment Unit ...

- Menu for Smart Devices
 - MenuTravelAgency

TravelAgency

- TravelAgency
 - .Net Environment**
 - Generators
 - Data Stores
 - Deployment Units
 - Java Environment
 - Generators
 - Data Stores
 - Deployment Units

Deploy Target: AWS Elastic Beanstalk

AWS Access Key ID	
AWS Secret Access Key	
AWS Default Region	US Standard/US East (N. Virginia)
Application Name	
Application Version	1
Application Environment Na	Production
Security	
Application Encryption Ke	4794A016611D4F3AB801B9E9DF807002
Java	
Target JRE	JRE 9 (or higher)
Package Format	Automatic

Target: AWS Elastic Beanstalk Options Only package

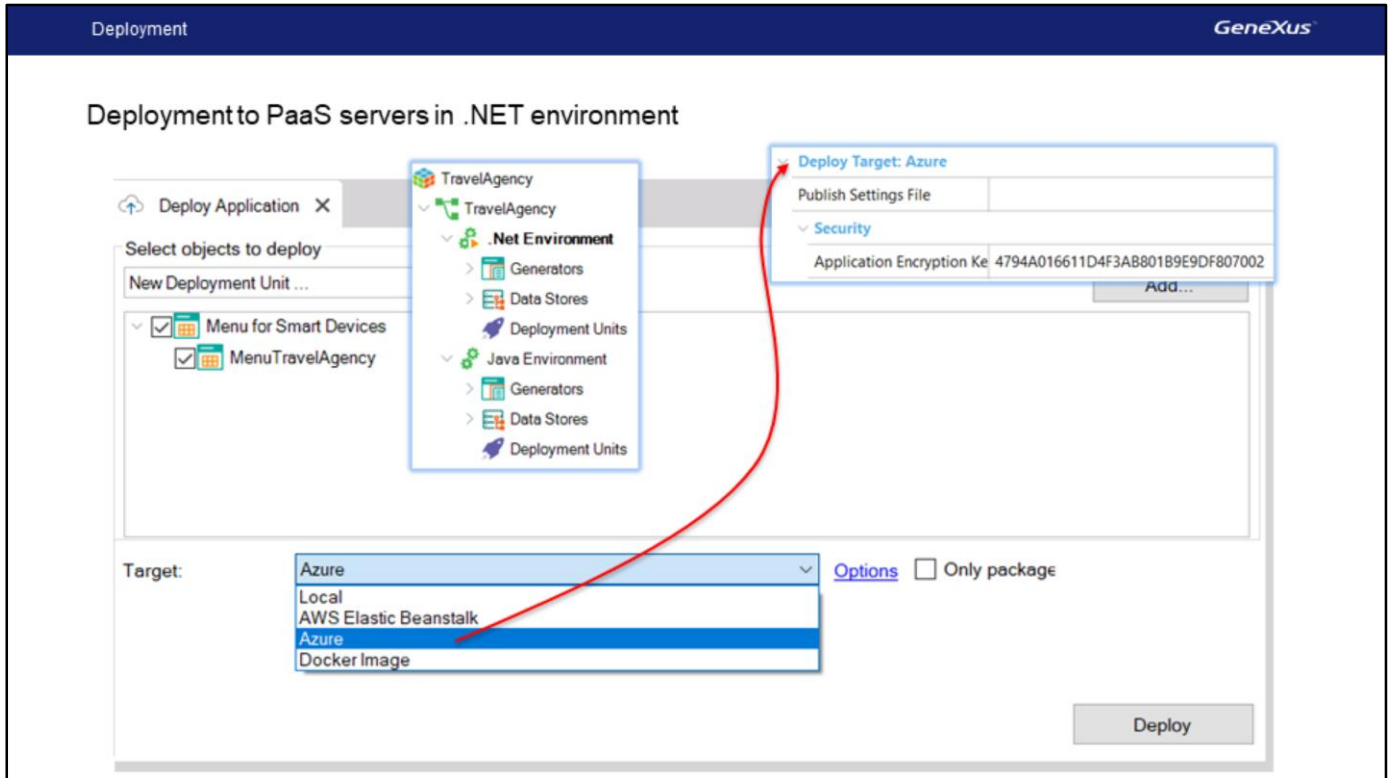
Display Name:
 Local
AWS Elastic Beanstalk
 AWS Lambda Function deploy (Main Procedure only)
 AWS Serverless Deploy
 IBM Bluemix
 Docker Image
 Google App Engine
 SAP Cloud Platform

Deploy

In Java, you can choose the following as destination: AWS Elastic Beanstalk, IBM Bluemix, Google App engine, and SAP Hana Cloud Platform.

To deploy in one of those platforms, several properties (user's credentials) need to be configured for the IDE to publish apps when the Deploy button is pressed.

If you don't want to publish yet, but you want to build the package, select the option labeled "Only Package."



For .NET, the options are AWS Elastic Beanstalk and Microsoft Azure.

Depending on the destination provider, the properties where the credentials are entered change accordingly.

For more information about the Application Deployment Tool, read:

<https://wiki.genexus.com/commwiki/servlet/wiki?32092>

For more information about the Application Deployment Tool, click on this wiki link:
<https://wiki.genexus.com/commwiki/servlet/wiki?32092>

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