

Deployment Automation with Octopus Deploy and TeamCity

Webinar Q&A

February 12, 2013

Do NuGet and Octopus work in a Java-on-Linux environment, or are they MS-only? If they do work in such an environment, do they work well?

- *They are Microsoft only at the minute, but there is a chance that the tentacles can run on Linux under mono. More on this as soon as it's available.*

Why do you need to run octo pack?

- *OctoPack creates the Nuget enabled package - <https://github.com/OctopusDeploy/OctoPack>*

Can I get a single nupack for ALL my sites and services?

- *You can package all together but there are issues when you want to deploy just 1 of the sites rather than everything together.*

Why not run only nuget pack?

- *Nuget pack on a project will include unwanted files (e.g. c# files) Octopack will only package what you need to run the application.*

When setting up machines and variables, are they shared across Octopus Projects?

- *Machines are shared; variables are project-specific*

Does this mean you can build debug packages as well as release?

- *Yes, he is telling the system what format the build needs to be in via a Parameter in TeamCity*

I missed the bit about env.EnableNuGetPackageRestore - could you explain a little further please?

- *This is some notation to tell the web application to restore the nuget packages referenced. This stops the need for checking your nuget.org 3rd party references into version control.*

What is the artifact pattern you are using in TeamCity?

- *There are no dependencies in the first demo - these will be demonstrated later. We pass the %build.number% instead to pass the dependency.*

What version of TeamCity added the TextBox parameter type for the build?

- *Paul is using TeamCity 7.1 and upwards.*

How does Octopus manage service inter-dependencies? Example - I want to deploy service A, but Service B must be stopped while Service A is deployed.

- *You can use PowerShell steps between packages to stop and start services during deployments.*

I think I just missed it; at our company we create two slightly different builds; debug and release. How can I prevent a debug release from being pushed to production? Do you manage something like that via the 'roles' in Octopus?

- *This was managed via the TeamCity build using a parameter.*

Can Steps be extended? Or is the idea to write a powershell script if required?

- *Paul is demoing a tool that will allow simple steps rather than having to write your own PowerShell script.*

In your example, Octopus project manages two .nupkg files, and you deploy to an environment as a release number. If I rev `_one_` of the .nupkg sites, does a new release re-deploy all sites or just the upgraded?

- *By default Tentacle only installs the package if the version has changed; in this case only the revised package will be installed.*

Can Octopus handle load balanced deployment, so can it tell the load balancer to take apps out of service?

- *Assuming that your Load Balancer has an API that can be called from PowerShell - it can be extended as a set of steps, 1. Take out of Rotation, Deploy, Put into service, Take second set out etc.*

Does octopus work with web transforms? ie. When installing to a particular environment eg. qa, staging, the transform is ran for that environment

- *They are - if you have web.release.config, then Octopus will always run it by default. It will also run a transform specific to an environment*

How does "transform specific to an environment" works?

- *E.g., if your environment is named "Staging", Octopus will also look for and run a Web.Staging.config transform.*

Are config string replacements always shown in the build log? I'm thinking about passwords.

- *Yes, but you can use permissions to control who can view that build log.*

How are powershell scripts managed? Do they get wrapped up in the Nuget package for each release or does Octopus store them in a general location on the server?

- *They are stored in the Octopus embedded database and sent to the agent as a string.*

Can you add the OctopusDeploy step in the same configuration that builds and tests your project?

- *Yes, the organization of your TeamCity project is very much a personal choice.*

How would you organize a system with multiple web apps and background processing apps in Octopus?

- *You would have one or more projects each with multiple steps to deploy each of the individual components of your system to the correct services. If you deploy them all together, then you'd have one project. If you deploy them all separately, you'd have multiple projects.*

Can we get a hold of those team city plugin's?

- *Source code is on github - <https://github.com/OctopusDeploy/Octopus-TeamCity> and <http://octopusdeploy.com/downloads>*

Are we able to get a hold of the TeamCity Build runners you are showing here?

- *Source code is on github - <https://github.com/OctopusDeploy/Octopus-TeamCity>*

If a service installs but fails to run, can an error be returned to Octopus? (Currently it just hangs as it can't get past that step)

- *As you can see, an error occurring will effectively fail a build. This is throwing an error from Octopus and TeamCity picks this up.*

Does the TeamCity web server need to be hosted on Windows?

- *TeamCity Server can run on Linux, Windows or Mac.*

Where does the "dep.bt1." name come from?

- *This is a snapshot dependency - in TeamCity <http://confluence.jetbrains.com/display/TCD7/Dependent+Build>*
- *Those are predefined reference names. Once you have Artifact or Snapshot dependency you may use %dep.btXXX.NAME% alike references, where btXXX is build configuration id.*

How can you tell Octopus to promote "x" version back and not the latest build?

- *This is using the build number from a dependency - you can pass in your own build number to the build.*

What's append if we set config values in different web.config based on compile configuration (like Web.Config.ReleaseTest, Web.Config.ReleaseStaging)?

- *Configs based on Environments or Configurations (e.g. Debug, Release) are run by default.*

Any recommendations on database schema migrations as relating to Octopus Deploy?

- *This would have to be a separate tool and then Octopus can run the migration for you. More to come on this in another webinar.*

How do you handle rollbacks?

- *Please see this blog post: <http://octopusdeploy.com/blog/rollback>*

Can Octopack handle database versioning, either schema or data, to ensure associated databases are deployed at the right version level alongside code?

- *This would have to be a separate tool and then Octopus can run the migration for you. More to come on this in another webinar.*

We use "FluentMigrator" for DB migrations - using commandline runners in the build step.

- *In Octopus you would simply package your migrations along with FluentMigrator into a NuGet package, and then have a Deploy.ps1 that invokes fluent migrator.*

Is there a way to force TeamCity to publish artifacts before all build steps have completed?

- *Artifact publishing is asynchronous. You may send service message to start publishing of an artifact(s) while build is running.*

Can you deploy a previous version?

- *This is using the build number from a dependency - you can pass in your own build number to the build.*

Can Octopus handle an approval workflow? Eg QA and a Manager must approve before pushing to production?

- *Paul is demoing this from the Octopus dashboard.*

Does the dashboard auto refresh?

- *Yes, it auto refreshes.*

Where is XPath defined to the location in Web.config where to change a value of Dev \ Test \ Prod name (or any other parameter depending on the environment)?

- *This is handled by Web.config Transforms. This is available from VS2010 and upwards.*

Skip steps? Can I skip the approval or only as admin?

- *You would have to be an administrator for this.*

Can we customize the build to include Code analysis or Code metrics?

- *You may add additional build steps into TeamCity build configuration to run code analysis like .NET/Java inspections, duplicates search and so on.*

Can I add an approval step that will generate an email to a team member asking them to log in? This would be useful for team members in different time zones.

- *You can add an email step before the manual step to notify them.*

Does Octopus support website projects as well as web app projects? If so, are there any limitations?

- *It does, Octopack doesn't due to the msbuild limitations. You can Nuget Pack on this website and Octopus takes over.*

Using OctoPack 2.0, I see it adds a dll in the .octopack folder. Is there a way to avoid having to check that in to source control?

- *It cannot be excluded from source control - due to passing MSbuild extra targets needed for the package*

Can Octopack read the check in comments from GIT and add them as nuget release notes?

- *When you use Octopack, there is another build parameter you can pass, `system.OctoPackReleaseNotesFile` (available on the document). This is a path to release notes that can be included in the release notes*

How are powershell scripts managed? Do they get wrapped up in the Nuget package for each release or does Octopus store them in a general location on the server?

- *They are embedded in the NuGet package.*

Can Octopus take artifacts from Artifactory or Nexus? (Maven repository managers)

- *It is Nuget only so far. If it has a nuget feed then Octopus can consume it. Adaptors would be a welcome addition.*

When creating nuget packages for web apps and windows services etc, are you setting msbuild to run a build against the .sln?

- *Yes, it needs to build the solution to create the artifacts*

What credentials does the tentacle run under when trying to install windows services or web sites and can this be specified?

- *Runs under local system account by default. Once it is installed, you can change the user*

Does Octopus manage service settings like run as user?

- *Runs under local system account by default. Once it is installed, you can change the user.*

Is there any transfer optimization during deploying binaries to tentacles? (If you deploy again and again the most files are probably the same)

- *It would be nice for this to happen, but it doesn't happen due to it being a nuget package being pushed across.*

Is it possible to use NuGet to package Java applications, without Visual Studio being involved? We're not a .NET shop at all.

- *Yes, people use Octopus to deploy Classic Asp and Node. As long as you can take the JAR files and nuget package them, then Octopus can deploy them.*

How would organize TeamCity/Octopus for multiple source control branches?

- *Multiple build steps can achieve this or build properties.*

Is there a way to do nightly builds on a schedule?

- *Yes, it's coming soon. More on this in release 1.4.*

Will support for delayed deployments be introduced to octo.exe? ("octo.exe create-release --delay=00:00:15")

- *Yes in 1.4 but you can do this with scheduled builds in TeamCity.*

How can I combine this with related tasks like shutting down load balancer nodes?

- *You would need to create a script to talk to your load balancer via its API*

Is Teamcity EAP 8 supported?

- *TC 8 will be supported as the plugins are under development at the minute.*

Does the Octopus Retention policy work in the OctopusPackageDirectoryPath folder?

- *There is a UI with the tentacle admin tool and the dashboard that can help you do this. You can follow up with the documentation for more information.*

Looks like the PackageCache folder just keeps growing as it retrieves nuget packages from TeamCity.

- *Please vote <http://youtrack.jetbrains.com/issue/TW-25838>*

Is there any way I can test the deployment on my local devbox before "releasing" to the server (and in effect test the deploy steps before making them available to everyone)?

- *1.4 will have functionality for this. Install a local tentacle service for this and you can test the deployment.*

I understand that I should script the loadbalancer but how to release and update to for example a webfarm without downtime?

- *It would completely depend on your LoadBalancer. You would have to build a flow to do this within the TeamCity project.*

Can I deploy to one server in an environment, then deploy to others after manual test? E.g. load balanced web servers.

- *Yes, you would need to build a flow and then write a script to change the load balancer status.*

Can you clone or copy project is Octopus like you can in TeamCity?

- *Unfortunately not at the minute, you can do this via its embedded RavenDB. It may come soon as it's highly sought after.*

What's the principle difference between Deploy and Promote? In theory deployment to any environment should be the same process. Why have 2 names?

- *There is no difference. The mechanisms are the same but there are different contexts. Paul would love suggestions on the naming.*

Can you migrate a collection of projects with a single click?

- *There is no difference. The mechanisms are the same but there are different contexts. Paul would love suggestions on the naming.*

How about cleaning up the PackageCache folder on the server?

- *This automatically happens. Every 3 days it will clean itself up.*

Is there a way to promote all projects on an environment to another environment, without doing it one by one?

- *No, not currently.*

What about build reports?

- *The dashboard gives a breakdown of what projects have what deployments in them. You can drill down to each environment and see what happens. There are no separate reporting tabs.*