



Consolidating Artifacts and Designing a Dependency Management Strategy



HELLO!

I am Eng Teong Cheah

Microsoft MVP

You can find me at @walkercet

1

Package Dependencies



What is dependency management

- Modern software development
- Dependencies on other projects and solutions



Elements of a dependency management strategy

- Standardization
- Package formats and sources
- Versioning



Source and package componentization

- Source componentization
- Package componentization



Scanning your codebase for dependencies

- Duplicate code
- High cohesion and low coupling
- Individual lifecycle
- Stable parts
- Independent code and components

2

Package Management



Packages

- The components you relay and depend upon in your software solution.
- A way to store those components in well defined format with metadata



Types of packages

- NuGet
- NPM
- Maven
- PyPi
- Docker



Package feeds

- Stored in a centralized place for distribution and consumption by others to take dependencies on the components it contains.



Private and public feeds

Public

- ▶ NuGet.org
- ▶ Npmjs.org
- ▶ PyPi.org
- ▶ Docker Hub

Private feeds

- ▶ MyGet
- ▶ Azure Container Registry
- ▶ Azure Artifacts
- ▶ Self-hosted solution



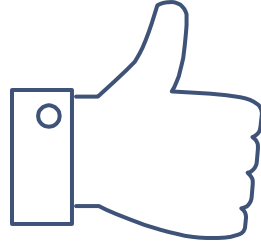
Package feed managers

- Installation and removal of local packages
- Pushing packages to a remote package feed
- Consuming packages from a remote package feed
- Searching feeds for packages



Azure Artifact – Types of package supported

- NuGet packages
- NPM packages
- Maven
- Universal packages
- Python



THANKS!

Any questions?

You can find me at
@walkercet



CREDITS

■ Microsoft Docs