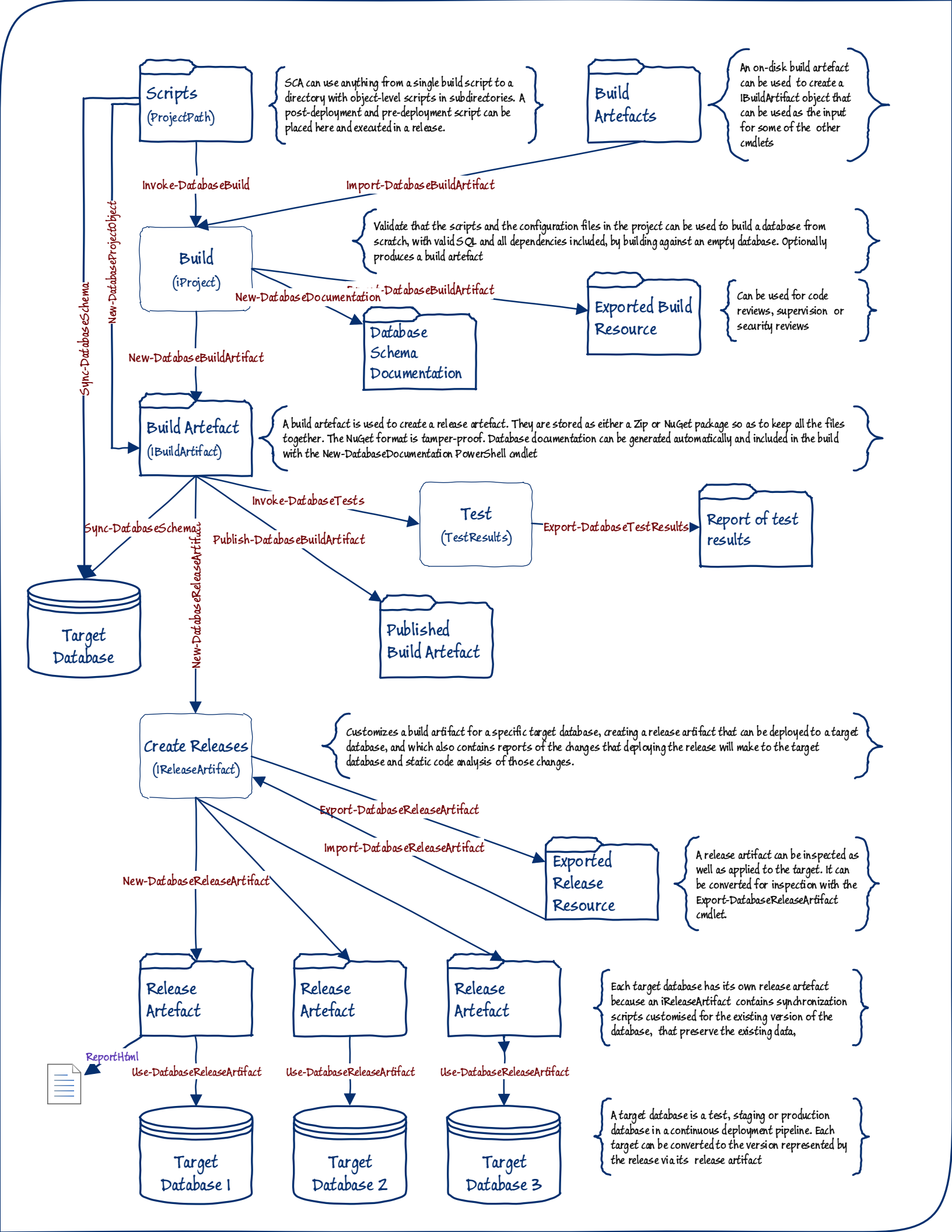
Scripts
(ProjectPath)
SCA can use anything from a single build script to a directory with object-level scripts in subdirectories. A post-deployment and pre-deployment script can be placed here and executed in a release.
Build Artefacts
An on-disk build artefact can be used to create a IBuildArtifact object that can be used as the input for some of the other cmdlets
Invoke-DatabaseBuild
Import-DatabaseBuildArtifact
Sync-DatabaseSchema
New-DatabaseProjectObject
Build
(iProject)
Validate that the scripts and the configuration files in the project can be used to build a database from scratch, with valid SQL and all dependencies included, by building against an empty database. Optionally produces a build artefact
New-DatabaseDocumentation
-DatabaseBuildArtifact
Exported Build Resource
Can be used for code reviews, supervision or security reviews
Database Schema Documentation
New-DatabaseBuildArtifact
Build Artefact
(IBuildArtifact)
A build artefact is used to create a release artefact. They are stored as either a Zip or NuGet package so as to keep all the files together. The NuGet format is tamper-proof. Database documentation can be generated automatically and included in the build with the New-DatabaseDocumentation PowerShell cmdlet
Invoke-DatabaseTests
Test
(TestResults)
Export-DatabaseTestResults
Report of test results
Sync-DatabaseSchema
Publish-DatabaseBuildArtifact
Target Database
Published Build Artefact
Create Releases
(IReleaseArtifact)
Customizes a build artifact for a specific target database, creating a release artifact that can be deployed to a target database, and which also contains reports of the changes that deploying the release will make to the target database and static code analysis of those changes.
Export-DatabaseReleaseArtifact
Import-DatabaseReleaseArtifact
Exported Release Resource
A release artifact can be inspected as well as applied to the target. It can be converted for inspection with the Export-DatabaseReleaseArtifact cmdlet.
New-DatabaseReleaseArtifact
Release Artefact
Release Artefact
Release Artefact
Each target database has its own release artefact because an iReleaseArtifact contains synchronization scripts customised for the existing version of the database, that preserve the existing data,
ReportHtml
Use-DatabaseReleaseArtifact
Use-DatabaseReleaseArtifact
Use-DatabaseReleaseArtifact
Target Database 1
Target Database 2
Target Database 3
A target database is a test, staging or production database in a continuous deployment pipeline. Each target can be converted to the version represented by the release via its release artifact