

ClientInstaller

client installer module

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1. Overview

ClientInstaller: *client installer module*

1.1. Intent

- Automates the installation of a ControlTier Client and bootstraps the client into the current project. Features automated install of the ControlTier Installer (client mode) and dependent Java Package.
- Support additional configurations for installation on a Cygwin/Win32 based client.

1.2. Problem

Provides an automation solution for the ControlTier client installation which can then be exposed at the Jobcenter level. This should provide an automation solution for users who may lack the knowledge of a ControlTier installation and/or have the responsibility for many installations within a captured process.

1.3. Discussion

This module is somewhat atypical of a normal ControlTier [Deployment](#) in that we are bootstrapping a ControlTier client into a project. However, the concept of a Deployment holds in that we are provisioning an entity (the ctier framework instance for the Node) with package dependencies (ControlTier Installer and Java). A "Separation of Concerns" should be considered here prior to automating this process. Many organizations, depending on policy and available resources, may automate this process within a Systems Operations provisioning solution such as [Puppet](#). Consider implementation of this specific process as an alternative to a larger scoped provisioning solution.

2. Design

Super Type Deployment

Role	Concrete. (Objects can be created.)
Instance Names	Unique
Notification	false
Template Directory	
Data View	Children, proximity: 1

Logger Name	ClientInstaller
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3. Constraints

3.1. Allowed Child Dependencies

- [ClientInstallerCygwinClient](#) 1
allowed setting dependency to override behavior to apply cygwin related configuration, see attribute-defaults.
- [ClientInstallerTargetCTierRoot](#) 1
allowed setting dependency, to override the target CTIER_ROOT, see attribute-defaults.
- [ClientInstallerTargetUser](#) 1
allowed setting dependency, to override the target user, see attribute-defaults.
- [ClientInstallerTrustClient](#) 1
allowed setting dependency, if settingValue set to true, will blindly trust remote clients over ssh, see attribute-defaults.
- [CTierInstallerZip](#) 1
allowed package dependency, to specify controltier installer package
- [JavaBin](#) 1
allowed package dependency, to specify dependent unix based java package
- [JavaZip](#) 1
allowed package dependency, to specify dependent windows based java package

1: These types have a *Singleton* constraint. Only one instance may be added as a resource.

4. Attributes

4.1. Defaults for Imported Attributes

Name	Default	Description
cygwinClient	false	sets cygwinClient to false and assumes a traditional unix client
targetCTierRoot	ctier	sets remote CTIER_ROOT as the "ctier" subdirectory of the remote user's \$HOME

targetUser	\${user.name}	sets remote target user to the local username as a reasonable default username
trustClient	false	sets trustClient to false to default to normal ssh behavior regarding trusting remote clients on the network

5. Commands

Note:

Commandline options displayed in square brackets "[]" are optional. If an option expects arguments, then angle brackets are shown after the option "<>". Any default value is shown within the brackets.

5.1. Deploy

automates installation and project configuration for a new controltier client

Executes the Deployment workflow for the ControlTier client installation. The behavior of the Deploy depends on configured attributes and/or supplied parameters. ControlTier implements a convention where it may prepend the username in the name of the Node object. This is to distinguish multiple ControlTier clients that may reside on the same machine where only the user differs. This will prevent this object from "colliding" between different client installs. The following behavior is noted:

If targetUser (established by default or explicit parameter) is the same user as the local user, the name of resulting Node object will be the name of the targetHostname. This is consistent with how ssh works in that the remote user is assumed to be the same as the local user.

If targetUser differs from the local user, the name of resulting Node object will have the "<targetUser>." prefixed to the targetHostname.

Usage

```
Deploy [-cygwinClient <>] -targetHostname <> [-targetUser <>]
```

5.1.1. Workflow

1. [configureClient](#)

Options

Option	Description
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cygwinClient	<i>optional, defaults to false, indicating target host is a cygwin client</i> cygwinClient parameter defaults to the cygwinClient attribute if set, see ClientInstallerCygwinClient type
targetHostname	<i>required, client target hostname</i>
targetUser	<i>optional, client target user overrides local or configured user</i> targetUser parameter defaults to the targetUser attribute if set, see ClientInstallerTargetUser type

5.2. configureClient

configure a new controltier client

Concrete implementation and is meant to be called by the Deploy workflow command.

Usage

```
configureClient [-cygwinClient <>] [-frameworkServerHostname
<>] [-frameworkServerPassword <>] [-frameworkServerPort <>]
[-frameworkServerUsername <>] [-reportcenterPort <>]
-targetCTierRoot <> -targetHostname <> [-targetUser <>]
[-trustClient <false>]
```

Options

Option	Description
cygwinClient	<i>configure cygwin client</i>
frameworkServerHostname	<i>framework server hostname</i> defaults to the framework server hostname
frameworkServerPassword	<i>framework password</i> defaults to the framework server password
frameworkServerPort	<i>framework server port</i> defaults to the framework server port
frameworkServerUsername	<i>framework username</i> defaults to the framework server username
reportcenterPort	<i>reportcenter port</i>

	defaults to the reportcenter port
targetCTierRoot	<i>client target CTIER_ROOT</i>
targetHostname	<i>client target hostname</i>
targetUser	<i>client target user</i>
trustClient	<i>trust remote clients when remotely executing</i>

6. Related Types

The following types are defined for use with ClientInstaller.

6.1. ClientInstallerTargetUser

6.1.1. Overview

ClientInstallerTargetUser: *client installer target user*

6.1.2. Design

Super Type

DeploymentSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.1.3. Attributes

6.1.3.1. Exported Attributes

Name	Property	Description
targetUser	settingValue	Identifies the target user for the installed ControlTier client

6.2. ClientInstallerTrustClient

6.2.1. Overview

ClientInstallerTrustClient: *trust remote ssh execution when trying to install on remote client*

6.2.2. Design

Super Type DeploymentSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.2.3. Attributes

6.2.3.1. Exported Attributes

Name	Property	Description
trustClient	settingValue	If true, will override the ssh host key protection by ignoring whether remote client is present in the local ssh known hosts file

6.3. ClientInstallerTargetCTierRoot

6.3.1. Overview

ClientInstallerTargetCTierRoot: *target CTIER_ROOT*

6.3.2. Design

Super Type DeploymentSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.3.3. Attributes

6.3.3.1. Exported Attributes

Name	Property	Description
targetCTierRoot	settingValue	relative or absolute path name of the CTIER_ROOT for the installed client. By default, ControlTier client is installed

		into "ctier" subdirectory of the remote user's \$HOME
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6.4. ClientInstallerCygwinClient

6.4.1. Overview

ClientInstallerCygwinClient: *client installer target user*

6.4.2. Design

Super Type
DeploymentSetting

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.4.3. Attributes

6.4.3.1. Exported Attributes

Name	Property	Description
cygwinClient	settingValue	If true, will override the assumption of a native unix client and will establish configuration suitable for a cygwin ControlTier client