

FireDaemonService

Service integration of FireDaemon Technologie's Windows Service wrapper

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1. Overview

FireDaemonService: *Service integration of FireDaemon Technologie's Windows Service wrapper*

1.1. Intent

Provide windows service lifecycle management for a windows application using the [FireDaemon](#) Service Manager.

- Override standard Service commands and integrate them with the FireDaemon command line UI.
- The following Service commands are overridden:
 - Stop: Stops Windows Service if the exe exists as a running service.
 - Configure: Configures the exe as a FireDamon/Windows Service via FireDaemon UI.
 - Start: Starts the Windows Serevice if the exe exists as a running service.
- The following Service commands are added to the Deploy sequence:
 - Remove: Removes the exe integrated Windows Service if it exists via FireDaemon UI
 - Add: Adds the exe as a Windows Service if it does not exist via FireDaemon UI

1.2. Problem

FireDaemon provides the ability to run any windows exe as a windows service in the case where an application may have been built without windows service support. This module simplifies the requirement of integrating the exe into FireDaemon by abstracting and automating the windows service lifecycle operations with respect to the ControlTier Service layer. Thus the burden of this integration is then reduced to the command line requirements to run the exe and FireDaemon and ControlTier do the rest.

1.3. Discussion

Since [FireDaemon](#) is a commercial product, the licensing of FireDaemon is required on the windows machine(s) where this automation will occur. This module is agnostic to this licensing and is left as a platform responsibility.

1.4. Example

1.5. Check List

1. See [FireDaemon](#) regarding licensing.

2. Design

Super Type Service

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

3. Constraints

3.1. Allowed Child Dependencies

- [FireDaemonExecutable](#) 1
- [FireDaemonServiceAccountName](#) 1
- [FireDaemonServiceAccountPassword](#) 1
- [FireDaemonServiceDescription](#) 1
- [FireDaemonServiceDisplayName](#) 1
- [FireDaemonServiceExecutable](#) 1
- [FireDaemonServiceName](#) 1
- [FireDaemonServiceParameters](#) 1

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

these dependencies are all FireDaemon related types.

3.2. Allowed Parent Dependencies

- Node
- Site

typical service which will allow Node and Site referrers.

4. Attributes

4.1. Exported Attributes

Name	Property	Description
installRoot	deployment-install-root	Installation root of the FireDaemon Service Manager, typically "C:\Program Files\FireDaemon".
workingDir	deployment-basedir	Working directory for the integrated FireDaemon service. This is typically the directory where the application exe resides.

4.2. Defaults for Imported Attributes

Name	Default	Description
fireDaemonExecutable	C:\Program Files\FireDaemon\FireDaemon.e	full path to the FireDaemon commandline exe, see installRoot regarding containing directory.
fireDaemonServiceExecuta		full path name the exe file to execute as a windows service (required).
fireDaemonServiceParamet		command line parameters to the fireDaemonServiceExecutable (optional).

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

Run the service deployment cycle, stopping, unconfiguring, installing package dependencies, configuring and the starting the service.

Override the standard Service Deploy command in order to include service removal/add commands. Deploy will always delete and readd the windows service to ensure consistency.

Usage

Deploy

5.1.1. Workflow

1. Stop
2. [Remove](#)
3. Packages-Install
4. Configure
5. [Add](#)
6. Start

5.2. Update

Run the service deployment cycle, same as Deploy

Effectively alias Update to the Deploy command.

Usage

Update

5.2.1. Workflow

1. [Deploy](#)

5.3. Add

Add the FireDaemon Windows service if it is not already installed.

In idempotent fashion, add the service if it does not exist.

Usage

Add

5.3.1. Workflow

1. [assertServiceIsInstalled](#)

5.3.2. Error Handler

Command	addService
---------	----------------------------

5.4. Remove

Remove the FireDaemon Windows service if it is installed.

In idempotent fashion, remove the service if it exists.

Usage

Remove

5.4.1. Workflow

1. [assertServiceIsNotInstalled](#)

5.4.2. Error Handler

Command	removeService
---------	-------------------------------

5.5. addService

Add the FireDaemon Windows service to the system

unconditionally add the windows service via FireDaemon

Usage

addService [-firedaemon <>]

Options

Option	Description
firedaemon	Location of the FireDaemon executable see fireDaemonExecutable attribute via FireDaemonExecutable type.

5.6. removeService

Remove the FireDaemon Windows service from the system

unconditionally remove the windows service via FireDaemon

Usage

removeService [-firedaemon <>] [-servicename <>]

Options

Option	Description
firedaemon	Location of the FireDaemon executable see fireDaemonExecutable attribute via FireDaemonExecutable type.

servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.
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5.7. assertServiceIsUp

Check whether the FireDaemon Windows service is up

query windows service layer via FireDaemon to assert if service is in up state.

Usage

```
assertServiceIsUp [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

5.8. assertServiceIsDown

Check whether the FireDaemon Windows service is down

query windows service layer via FireDaemon to assert if service is in down state.

Usage

```
assertServiceIsDown [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

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5.9. assertServiceIsInstalled

Check whether the FireDaemon Windows service is installed

query windows service layer via FireDaemon to assert if service exists.

Usage

```
assertServiceIsInstalled [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

5.10. assertServiceIsNotInstalled

Check whether the FireDaemon Windows service is not installed

query windows service layer via FireDaemon to assert if service does not exist.

Usage

```
assertServiceIsNotInstalled [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

5.11. startService

Start the FireDaemon Windows service

unconditionally start the service via FireDaemon

Usage

```
startService [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

5.12. stopService

Stop the FireDaemon Windows service

unconditionally stop the service via FireDaemon

Usage

```
stopService [-firedaemon <>] [-servicename <>]
```

Options

Option	Description
firedaemon	<i>Location of the FireDaemon executable</i> see fireDaemonExecutable attribute via FireDaemonExecutable type.
servicename	<i>FireDaemon Windows service name</i> see servicename attribute via FireDaemonServiceName type.

6. Related Types

The following types are defined for use with FireDaemonService.

6.1. FireDaemonServiceSetting

6.1.1. Overview

FireDaemonServiceSetting: *FireDaemon configuration setting*

6.1.1.1. Intent

Supertype to encapsulate related subtypes to the support of FireDaemon.

6.1.2. Design

Super Type Setting

Role	Abstract. (Objects cannot be created.)
Instance Names	Unique

6.2. FireDaemonExecutable

6.2.1. Overview

FireDaemonExecutable: *Location of the FireDaemon command-line executable*

6.2.1.1. Intent

FireDaemonServiceSetting subtype to represent the fully qualified windows path to the FireDaemon.exe executable. When FireDaemon is installed, the default installation places the FireDaemon.exe in "C:\Program Files\FireDaemon"

6.2.2. Design

Super Type [FireDaemonServiceSetting](#)

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

6.2.3. Constraints

6.2.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.2.4. Attributes

6.2.4.1. Exported Attributes

Name	Property	Description
fireDaemonExecutable	settingValue	attribute to represent the full path to the FireDaemon.exe program.

6.3. FireDaemonServiceName

6.3.1. Overview

FireDaemonServiceName: *Name of the FireDaemon Windows service*

6.3.1.1. Intent

FireDaemonServiceSetting subtype to represent the name of the FireDaemon service that will show in the windows services management console.

6.3.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.3.3. Constraints

6.3.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.3.4. Attributes

6.3.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceName	settingValue	attribute to represent the name of the integrated FireDaemon service.

6.4. FireDaemonServiceDisplayName

6.4.1. Overview

FireDaemonServiceDisplayName: *Displayed name of the FireDaemon Windows service*

6.4.1.1. Intent

FireDaemonServiceSetting subtype to represent the display name of the FireDaemon service that will show in the windows services management console.

6.4.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.4.3. Constraints

6.4.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.4.4. Attributes

6.4.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceDisplay	settingValue	attribute to represent the display name of the integrated FireDaemon service.

6.5. FireDaemonServiceDescription

6.5.1. Overview

FireDaemonServiceDescription: *Description of the FireDaemon Windows service*

6.5.1.1. Intent

FireDaemonServiceSetting subtype to represent the description of the FireDaemon service that will show in the windows services management console.

6.5.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.5.3. Constraints

6.5.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.5.4. Attributes

6.5.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceDescrip	settingValue	attribute to represent the description of the integrated FireDaemon service.

6.6. FireDaemonServiceExecutable

6.6.1. Overview

FireDaemonServiceExecutable: *Executable for FireDaemon to run as a Windows service*

6.6.1.1. Intent

FireDaemonServiceSetting subtype to represent the fully qualified path to the FireDaemon command line executable (FireDaemon.exe). Typically, this would be in "\Program Files\FireDaemon" directory.

6.6.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.6.3. Constraints

6.6.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.6.4. Attributes

6.6.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceExecuta	settingValue	attribute to represent the fully qualified path to the integrated FireDaemon service (exe file).

6.7. FireDaemonServiceParameters

6.7.1. Overview

FireDaemonServiceParameters: *Parameters for the windows service via FireDaemon*

6.7.1.1. Intent

FireDaemonServiceSetting subtype to represent optional parameters passed to the service executable.

6.7.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.7.3. Constraints

6.7.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.7.4. Attributes

6.7.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceParamet	settingValue	attribute to represent the parameters passed to the service executable.

6.8. FireDaemonServiceAccountName

6.8.1. Overview

FireDaemonServiceAccountName: *Account name to use with the FireDaemon Windows service.*

6.8.1.1. Intent

FireDaemonServiceSetting subtype to represent the windows account to run the service as.

6.8.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.8.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.8.4. Attributes

6.8.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceAccount	settingValue	attribute to represent the effective windows user to run the service as.

6.9. FireDaemonServiceAccountPassword

6.9.1. Overview

FireDaemonServiceAccountPassword: Account password to use with the FireDaemon Windows service.

6.9.1.1. Intent

FireDaemonServiceSetting subtype to represent the password of the windows account to run the service as.

6.9.2. Design

Super Type

[FireDaemonServiceSetting](#)

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

6.9.3. Constraints

6.9.3.1. Allowed Parent Dependencies

- [FireDaemonService](#)

Restrict setting objects of this type to be referred to by a FireDaemonService object.

6.9.4. Attributes

6.9.4.1. Exported Attributes

Name	Property	Description
fireDaemonServiceAccount	settingValue	attribute to represent the password of the effective windows user to run the service.