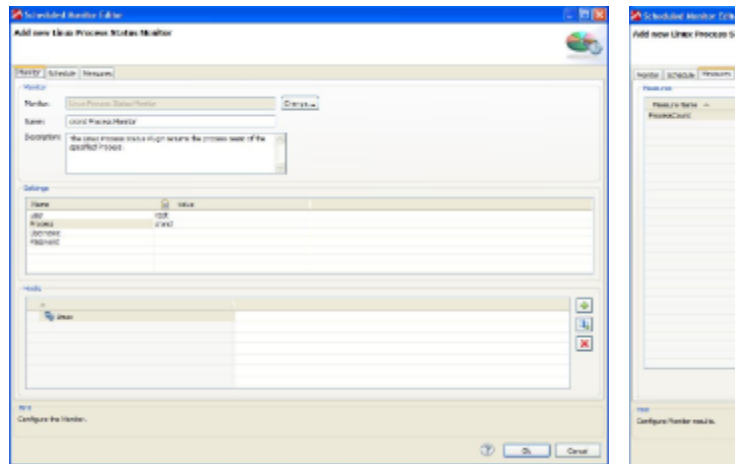
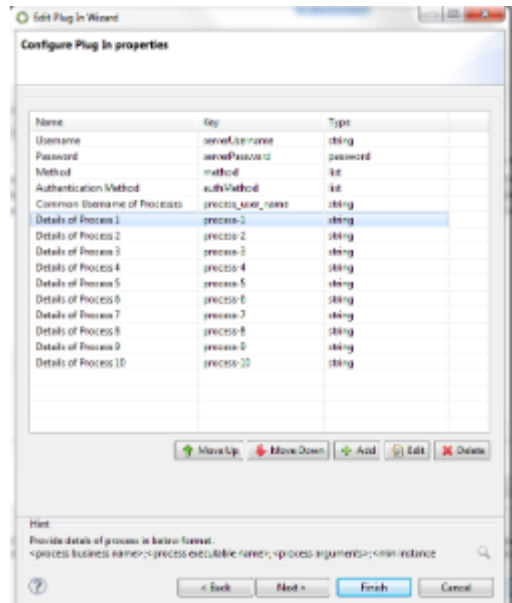
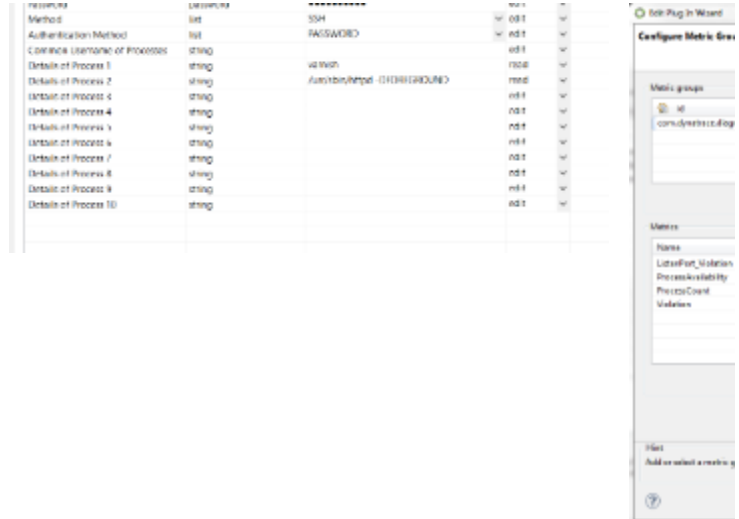
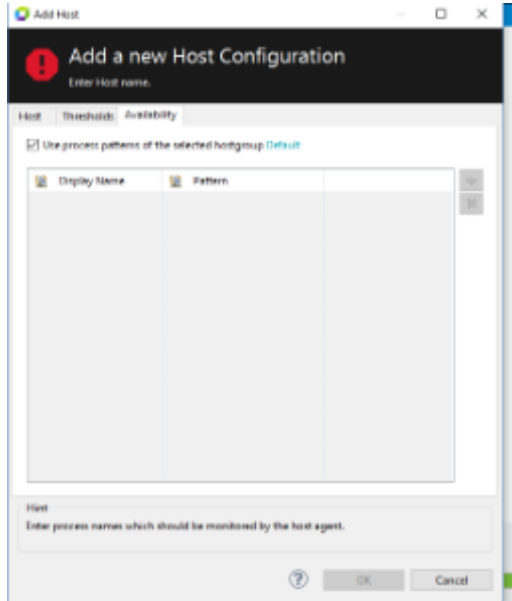


# Linux Process Monitor Plugin

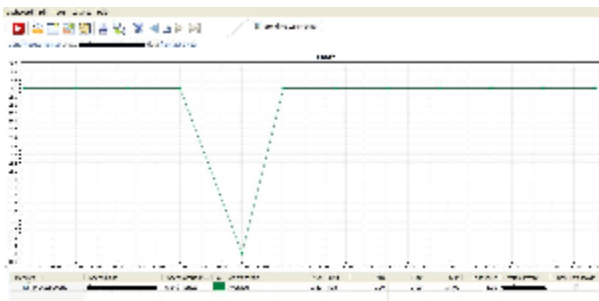
## Overview

The monitor gets the process count via the ps -fu command. The user credentials entered when configuring the monitor must have ssh access to the remote server you wish to monitor.



Configuration screen for Linux Process Monitor

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## Plugin Details

<b>Plug-In Versions</b>	<a href="#">Linux Process Status Plugin 1.0.2</a> <a href="#">Linux Process Status Plugin 1.2.10</a>
<b>Author</b>	Derek Abing: version 1.0.2 Praveen Begur (Dynatrace): version 1.2.10
<b>License</b>	<a href="#">dynaTrace BSD</a>
<b>Support</b>	<a href="#">Not Supported</a> If you have any questions or suggestions for these plugins, please add a comment to this page, use our <a href="#">forum</a> , or drop us an email at <a href="mailto:community@dynatrace.com">community@dynatrace.com</a> !
<b>Known Problems</b>	
<b>Release History</b>	2012-03-05 Initial Release 2016-01-20 version 1.2.10 Download the latest releases on the <a href="#">GitHub Project Page</a> .

## Version 1.0.2

### Provided Measures

- **ProcessCount**: Returns count of running processes matching the configured identifier.

### Configuration

Name	Value
user	The user the process is running under.
Process	Linux Process name.
Method	Specify the type of Connection.
Authentication Method	Specify the type of SSH Authentication.
Username	The username that is used for authorization with the host.
Password	The password for the username.

### Installation

Import the Plugin into the dynaTrace Server. For details how to do this please refer to the [dynaTrace documentation](#).

## Version 1.2.10

### Changes compared to Version 1.0.2

1. This version makes it possible to check Avail of multiple Processes running on a Server in one execution. So if a Server has 10 different processes to be monitored, we can configure all 10 Processes in one Monitor and not have to create 10 different Monitors. This helps to reduce administration overhead of the Plug-in.
2. This version introduces capability to check if certain Port Numbers are listening or not.
3. The plug-in provides two high level metrics for an IT Manager – a) Availability and b) Violation. Availability can either be 0% (something that we are expecting is not working) or 100% (All Green). Violation is num of times Availability is less than 100% (i.e zero %) during a single execution. These metrics help in creating an overall IT manager SLA dashboard showing overall Avail and No of Violations of

100% Avail in a day or week etc.

4. The plug-in uses two criteria to determine availability –
  - a. Process executable along with expected arguments should be listed in 'ps -ef'
  - b. The no of Process instances (or rather threads spawned by a Process) should be more than Min No of Instances expected of the Process. This is especially useful for Web Server processes like Apache which spawn multiple worker threads. So for ex The Apache WebServer process for Trade App could possibly spawn 4 worker processes and hence the plug-in should be able to determine if 4+1=5 processes are found in 'ps -ef' or not. If only 1 Process is found for TradeApp, then we can assume that something must have gone wrong with the TradeApp Apache and hence it is having only 1 Process instance and thus this Process is declared with Availability=0%.
  - c. optionally Listen Port Nos of the Process should be listed in 'netstat -ntl'.
5. Inputs: User needs to specify
  - a. Name of the Process (logical/business name)
  - b. Name of executable: For ex /usr/bin/java
  - c. Unique strings in the Arguments passed to executable: For ex config=/somepath/trader.xml
  - d. Expected Min number of Process instances. For ex: 4
  - e. Listen Port Numbers (comma separated)
6. The plug-in executes 'ps -ef' and grep's for the executable name and process arguments and counts how many such process instances are found. If No of instances is less than expected no of instances, Avail=0%. Otherwise it is 100% and then Listen Port check is done.
7. If User specifies any Listen Port No's to be checked, then plug-in executes 'netstat -ntl' and checks if the expected port no's are present or not.

## Usage

1. Configure the monitor with target host (as usual)
2. Enter details of a Process in a ';' separated string – one line per Process. Format is <Business or Nick Name of Process>;<Process Executable>;<Some unique string in Process arguments>;<Min Process instance count>;<comma list of Listen Port Numbers>
3. Create Line or Bucket Chart for Availability (aggregation=average)
4. Create Bucket Chart for Availability Violation (aggregation=sum). This tells us how many times in a day was Avail found to be less than 100%.
5. Create Bucket Chart for and Listen Port Violation (aggregation=sum).