

NGASI AppServer Manager User Guide

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Part



1 Introduction

This section provides a short overview of NGASI AppServer Manager.

1.1 Overview

NGASI AppServer Manager enables Private JVM Java Hosting and Ruby on RAILS Hosting in a shared environment. This allows you to install and configure just about any standard Application. Also you are able to restart the Runtime (JAVA JVM) at anytime. Most Shared JVM only allow you to upload a WAR, jsp, or Servlet. And in most cases you would need to customize your JAVA Application to comply with the shared JVM environment. Often times there are class and version conflicts in such an environment. In addition there is an inherent security risk with a shared JVM, as you are sharing the same JVM with other user applications.

NGASI AppServer Manager solves this limitation with shared JAVA Hosting by enabling you to run a separate and different JVM and Application Server.

NGASI AppServer Manager benefits summary:

- Multiple JDKs
- Multiple JDK versions
- Multiple Application Servers
- Multiple Application Server Versions
- Application Factory
- One Click Application installation

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2 Getting Started

Things you need to know before using NGASI AppServer Manager.

2.1 Requirements

Web Browsers:

Supported web browsers include:

Internet Explorer 6

Internet Explorer 7 and higher

Mozilla Firefox 1.5 and higher

Safari

Google Chrome

NOTE: Allow Popups must be enabled.

2.2 Quick Start

Quick Start:

The Login URL should have been provided by your Administrator.

It is usually in the form:

<http://yourhostname:8666>

<https://yourhostname:8663>

Or in Plesk or cPanel, it is possible your Administrator may have created a Custom Button with a direct Link to NGASI AppServer Manager.

The user name and password should be the same as your System, Domain or Web Account FTP user.

After Login:

Application Server Installation



1)Click "AppServer Manager" Fisheye Menu Item

2)Click Install Tab



3)Click Install Button



4)Click "Start/Stop" tab on the left



. Then Click "Start" to start Application Server



Post Application Server Installation:

If integrated with a Control Panel, such as Plesk, cPanel, or DotNetPanel, to map requests to the Application Server, follow the steps below.



4) Click "Web Server and Hosting Manager Configuration"



5) Set one or more [Web-to-Application](#) Server Path(s).
You may set the "Wildcard" Map, which maps all Web Server requests



to the Apache or IIS Web Server.

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3 Control Panels

Information on Web Hosting Control Panels support by NGASI AppServer Manager.


3.1 cPanel/WHM

Please refer to [Could not reserve enough space for object heap](#) topic.

3.2 Plesk

Plesk:

If You see the Tomcat icon, do not click on it. That takes you to Plesk's default Java Application server support on a shared JVM.

You should click the NGASI Appserver Manager icon , which may be under the custom button section in your domain view.

Make sure the FTP User for the domain is set as the "Application Server Default System User" assigned by your Administrator.

Then click the "NGASI AppServer Manager" icon to access NGASI.

Also check with your Administrator that the user was assigned access to NGASI AppServer Manager.

NOTE: Make sure the FTP User Password does not contain #

Also refer to:

[The page cannot be displayed because an internal server error has occurred.](#)

Web Statistics (Linux)

Setting Wildcard Mapping to the Application Server forwards all requests to the Application Server. This prevents other requests, including Web Statistics, from being processed by the Web Server. The server response will include an error similar to:

404 - /plesk-stat/webstat/

To get around the Web Statistics issue, create a subdomain called "ngstats", that use the FTP user account of the main domain. Then login to NGASI and reset the Wildcard mapping. Now instead of using

<http://mydomain.com/plesk-stat/webstat/>

to view the Web Statistics, browse with the following URL:

<http://ngstats.mydomain.com/plesk-stat/webstat/>

3.3 DotNetPanel

The NGASI DotNetPanel user is created with the default password "coolgeek". The user must change the default password after login. The password must be the same as the password to login to DotNetPanel Portal.

All application server related files are installed under:
C:\HostingSpaces\<USER_NAME>\appservers

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4 AppServer Manager



The AppServer Manager
The main module for Application Server Management.

4.1 Install



Install tab
Select, Install, and/or Configure Application Server.

After logging into NGASI AppServer Manager:
1)Click the "AppServer Manager" Fisheye menu item
2)Click the "Install" tab
3)Select the Application Server you would like to install
4)Click "Setup" to proceed

4.2 Start/Stop



Start/Stop tab
Start, Stop, or Restart Application Server. Three red circular icons: a play button, a square, and a starburst.

4.3 Logs



Logs tab
System out Logs

4.4 JDKs



JDKs
Set preferred JDK from available version list.

After logging into NGASI AppServer Manager:
1)Click the "AppServer Manager" Fisheye menu item
2)Click the "JDK" tab
3)Select the JDK Version you would like to install
4)Click "Set JDK" to proceed

4.5 Application Factory

Application Factory



The Application Factory is a stack of common standards based JAVA, RAILS, and PHP applications. Applications are packaged in the SWAR format to allow one click installation.

Some of the applications available in the Application Factory or Application Server Bundle are:

- [CHATive](#)
- [Confluence](#)
- [Cream](#)
- [eHour](#)
- [JForum](#)
- [Jira](#)
- [JSPWiki](#)
- [JRuby](#)
- [phpBB](#)
- [Struts](#)
- [Liferay](#)
- [Magnolia](#)
- [JTrac](#)
- [KonaKart](#)
- [OpenCMS](#)
- [OpenEdit](#)
- [phpList](#)
- [Roller](#)
- [Tracks](#)
- [XWiki](#)
- [Quercus](#)
- [WordPress](#)
- [ZK](#)

Note you can add your own Applications to your own personal repository. Follow the steps below to do so.

There are 2 methods:

1) The easiest and recommended way is to use the Application Upload Feature by uploading the JAVA (.war or .ear), or RAILS and PHP (.zip) via the Application Factory interface.

or

2) The applications should be packaged in the SWAR (SaaS Web Application Archive) format. Please refer to <http://www.ngasi.com> for more information on SWAR.

Place the expanded SWARs in the Applications repository under the following directory:
<ACCOUNT_HOME>/applications/

4.6 Backups

Backups

NGASI has a built in backup engine (which needs to be enabled by the Administrator).

If the Backup engine is enabled, your webapps, conf, and bin application server directories are archived.

In addition the ./appservers/private directory is also archived. The private directory is located outside the application server directory tree. You may place important data files that you do not want to be included in the application server directory in the private directory to ensure they are included in the backup.

4.7 Services

Additional Features.


4.7.1 Load Balancing

If your account is the Primary Node in a Load-Balance cluster, you are able to manage the Cluster from the NGASI AppServer Manager console.

Specific functions including:

- Setting the Loadfactor of nodes.
- Synchronizing the nodes and the Load-Balancing configuration.

Click Services 

Then Click Load Balance Tab 

Load Balancing Primer

Tips for a successful load-balancing strategy:

All persistent data and state should be saved in a central database accessible by the nodes in the cluster

The database logic schema should be as dumb as possible. In other words use the database more as a raw storage. So place more logic on the application side. That in turn would result in more processing on the application servers and less on the Database.

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5 Web Server Configuration



Web Server and Hosting Manager Configuration

The module that bridges the Application Server to the Apache or IIS Web Server (and vice versa). This is for accounts with the supported [Web Control Panels](#).

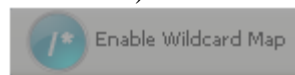
5.1 Mapping

Web Server Mapping tab



Used for mapping paths from the Web Server Virtual Hosts (not to be confused with the Application Server Virtual Hosts)

to the Application server. Setting the Wildcard map maps all host requests to the application server. Or you may set specific mappings, such as /portal (/portal/* for IIS), etc.



5.2 Additional Domain Mapping

In most hosting environments, you would have access to 1 JVM or application server.

And you may have multiple domains that you want to map to the application server. Below are the steps to map additional domains to the application server under specific Web Hosting Control Panels.

Plesk

After [Mapping](#) the primary Domain to the Application Server, you may add additional domain mapping by following the Steps below:

- 1) In Plesk go to the Primary Domain section.
- 2) Click the "Domain Aliases" button under the "Domain" sub-section.
- 3) Set the additional Domain (note if the domain was already created, it needs to be deleted first).

FOR Regular Domains, Your Administrator must have set the following:

- a) Login to NGASI as Administrator
- b) Click Users List

- c) Select User
- d) Click "Customize User Configuration" Edit Button
- e) Click Control Panel tab
- f) Check the "Additional Client Domains" CheckBox
- g) Click "Save"

NOTE: The Administrator can set this feature Globally by Adding the following entry:
additional_client_domain_support=true

in the:

/usr/ngasi/webapps/WEB-INF/ws/webapps/appservermgr/ZP-INF/wsportal.properties

- 4) Log into NGASI AppServer Manager
- 5) Go to "Web Server and Hosting Manager Configuration".
- 6) Reset the Mapping.

cPanel

After [Mapping](#) the primary Domain to the Application Server, you may add additional domain mapping

by following the Steps below:

- 1) In cPanel go to the Site Management Tools section.
- 2) Click the "Parked Domains" button (this feature must be enabled by the Administrator).
- 3) Set the additional Domain (note if the domain was already created, it needs to be deleted first).

For cPanel "Addon Domains", if the main domain is called mydomain1.com and you create an

addon domain called mydomain2.com, then mydomain2.com will appear as mydomain2.mydomain1.com in the Web Server Virtual Hosts list under the NGASI Web Server Configuration section.

- 4) Log into NGASI AppServer Manager
- 5) Go to "Web Server and Hosting Manager Configuration".
- 6) Reset the Mapping.

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6 Application Servers

NGASI supports a number of the most popular Application Servers, including Tomcat, Glassfish, JBoss, Jetty, and Oracle.
In addition NGASI supports Application Server bundles, such as Liferay Portal.

6.1 Tomcat

6.2 Oracle

As a license is required for Oracle-OC4J, you would need to copy the licensed zip file to one of the following directories

before installing with NGASI:

`/usr/ngasi/webapps/ROOT/WEB-INF/ngasi/appservers/` (Administrator access would be required).

Under the above directory, all accounts would have access to the Oracle-OC4J.

OR

`<USER_HOME>/appservers/`

Under the above directory, only the present account would have access to the Oracle-OC4J.

e.g. `oc4j_extended_101330.zip`

The default admin password for the installed Oracle-OC4J is "coolgeek".

It is recommended you change immediately.

6.3 JBoss

JBoss JMX Console

NGASI protects the JMX Console with a random generated password.

The password file is located here:

`..conf/props/jmx-console-users.properties`

6.4 Glassfish

Glassfish Admin Console

If using Glassfish proxied by Apache Httpd, e.g. via cPanel,

you should be able to access your individual Glassfish Admin Console like so:

<http://userdomain.com:4848/>

or

<http://gadmin.userdomain.com:4848/>

NOTE: You must first enable the Web Mapping in the NGASI [Web Server Configuration](#) section.

Check with your Admin if not configured.

NOTE: If using the subdomain "gadmin", you will need to create the sub-domain gadmin.

(Depending on on control panel, your Administrator may add gadmin to Domain zone template) .

Also port 4848 should not be blocked by any Firewall.

Also if proxied by Apache, you may see the URL of your Deployed Application displayed in Glassfish Admin Console like so:

<http://gadmin.userdomain.com:5394/myapp>

Ignore that and use the following URL:

<http://userdomain.com/myapp>

6.5 Jetty

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7 Troubleshoot

Troubleshooting solutions for NGASI AppServer Manager.

7.1 No Group or System Permissions assigned. Please check with Administrator.

Verify the FTP user, used to log into NGASI AppServer Manager has shell or login access enabled (this is set in the Domain setup or "Web Hosting Settings" in Plesk).

The screenshot shows the 'Access to system' configuration page in Plesk. The 'Access to system' dropdown menu is open, showing three options: 'Login prohibited' (selected), 'Login prohibited', and 'Login allowed'. A red circle highlights this dropdown menu. Other settings visible include 'SSL support' (checked), 'FTP/Microsoft FrontPage Login' (asmdemo), 'Old FTP/Microsoft FrontPage password' (*****), 'New FTP/Microsoft FrontPage password' (empty), 'Confirm password' (empty), 'Hard disk quota' (2000 MB), and 'Create Web site using Sitebuilder' (unchecked).

Physical hosting setup page for domain [heatme.com](#)

IP Address

IP Address: 77.420.400.65 Exclusive (1)

Certificate: Default Certificate (Administrator's repository)

Preferences

SSL support:

FTP/Microsoft FrontPage Login *: tomjones

Old FTP/Microsoft FrontPage password: *****

New FTP/Microsoft FrontPage password:

Confirm Password:

Hard disk quota: MB

Access to system: Login enabled

SiteBuilder support

Publish site with SiteBuilder: (Component was not installed)

Microsoft FrontPage support

Plesk for Windows Domain Setup:
The FTP/Frontpage user must have Access to system (Login enable)

Unlin

In cPanel, the Domain FTP user is setup either when the account is created or when setting up the Domain.

Also check with your Administrator that the user was assigned access to NGASI AppServer Manager

NOTE: If you reset the System or FTP user associated with the Application server, the Operating System and/or Control Panel may delete all the files in the directory. In that case you would need to re-install the Application Server via NGASI AppServer Manager.

7.2 Bind Exception

These are the steps to follow with BindExceptions:

- 1) If you edited the Application Server configuration, make sure you did not overwrite the Ports that were assigned by NGASI AppServer Manager.
- 2) Try Restarting the Application Server. Do so by shutting down and waiting for about a minute before starting up again.
- 3) If problem continues contact the Administrator.
- 4) If on Linux/Unix, check that there is a localhost entry in the /etc/hosts file.

7.3 Remote Address

All Remote Addresses keep resolving to 127.0.0.1

This is because the Apache Server has been configured with mod_proxy. You may ask your

administrator
to change to `mod_proxy_ajp`. If changing to `mod_proxy_ajp` is not possible, then you may retrieve the Remote Addresses in your application through the "x-forwarded-for" Request Header Attribute. For example:

```
String remoteAddr = request.getHeader("x-forwarded-for");
```

7.4 Fail to Process [object Object]

Allow Popups must be enabled in your browser.

7.5 Could not reserve enough space for object heap

*Could not reserve enough space for object heap
Could not create the Java virtual machine.*

Possible Reasons:

- 1) This error means there is not enough RAM memory allocated to the JVM or VPS (if running within a VPS)
- 2) The user limits are set too low in `/etc/security/limits.conf` or `/etc/profile/.bash_profile` in Linux.
- 3) The "Shell Fork Bomb Protection" feature (AKA jailshell) is enabled in cPanel/WHM.
- 4) The allocated Memory heap to the JVM is greater than 1.5GB and the OS is only 32BIT.

7.6 (Plesk) Default page

In Plesk you keep getting the default Plesk page after installing your Application Server with NGASI.

The page has a message similar to the following:

Domain Default page

or

1) hosting for this domain is not configured

or

2) there's no such domain registered in Plesk.

Solution:

Login to the NGASI AppServer Manager, Click the "Web Server and Hosting Configuration" fisheye menu item. Click the "Web Server Mapping" tab. Then, as a start, Click the "Enable Wildcard Mapping" button. Browse to your domain again (you may need to refresh your browser by closing and re-opening it again).

7.7 Application Server does not work after switching Domain and/or System User

Application Server does not work after switching Domain and/or System User

In this case you will need to re-install the Application Server.

This is because the Web Control Panel sets the Home Directory of the system user associated with the Domain in the directory tree of the Domain's httpdocs directory. As the Application Server is run as the system user, its location is under the system user's home directory.

So if you remove the domain, that directory is removed. Thus the Application Server is removed.

7.8 The page cannot be found

The page cannot be found (in IIS)

Problem:

After creating a Path Map (/portal/*), you browse to <http://www.mydomain.com/portal>, and you get the above error.

Solution:

In IIS, you must end the Path Map in the URL with at least a trailing slash (/) like so:

<http://www.mydomain.com/portal/>

NOTE: Also make sure the application server is running (ON in NGASI AppServer Manager).

7.9 Tomcat Fails to Shutdown Completely

Problem:

If Tomcat fails to shutdown completely:

```
Aug 23, 2007 11:35:38 AM org.apache.catalina.connector.Connector pause
SEVERE: Protocol handler pause failed
java.net.ConnectException: Connection timed out
    at java.net.PlainSocketImpl.socketConnect(Native Method)
    at java.net.PlainSocketImpl.doConnect(PlainSocketImpl.java:333)
    at java.net.PlainSocketImpl.connectToAddress(PlainSocketImpl.java:195)
    at java.net.PlainSocketImpl.connect(PlainSocketImpl.java:182)
    at java.net.SocksSocketImpl.connect(SocksSocketImpl.java:366)
    at java.net.Socket.connect(Socket.java:519)
    at java.net.Socket.connect(Socket.java:469)
    at java.net.Socket.<init>(Socket.java:366)
    at java.net.Socket.<init>(Socket.java:208)
    at org.apache.jk.common.ChannelSocket.unLockSocket(ChannelSocket.java:486)
    at org.apache.jk.common.ChannelSocket.pause(ChannelSocket.java:283)
    at org.apache.jk.server.JkMain.pause(JkMain.java:681)
    at org.apache.jk.server.JkCoyoteHandler.pause(JkCoyoteHandler.java:153)
    at org.apache.catalina.connector.Connector.pause(Connector.java:1074)
    at org.apache.catalina.core.StandardService.stop(StandardService.java:563)
    at org.apache.catalina.core.StandardServer.stop(StandardServer.java:744)
    at org.apache.catalina.startup.Catalina.stop(Catalina.java:616)
    at org.apache.catalina.startup.Catalina.start(Catalina.java:591)
    at sun.reflect.NativeMethodAccessorImpl.invoke0(Native Method)
    at sun.reflect.NativeMethodAccessorImpl.invoke(NativeMethodAccessorImpl.java:39)
```

```
at sun.reflect.DelegatingMethodAccessorImpl.invoke(DelegatingMethodAccessorImpl.java:25)
at java.lang.reflect.Method.invoke(Method.java:597)
at org.apache.catalina.startup.Bootstrap.start(Bootstrap.java:288)
at org.apache.catalina.startup.Bootstrap.main(Bootstrap.java:413)
Aug 23, 2007 11:35:39 AM org.apache.catalina.core.StandardService stop
INFO: Stopping service Catalina
```

Solution:

If on Linux, make sure the system hostname points to a valid IP address in /etc/hosts

7.10 Invalid username and/or password, please try again

If accessing NGASI AppServer Manager directly from a control panel such as Plesk or cPanel, and the following message is displayed:

Invalid username and/or password, please try again

Solution:

Make sure the FTP User Password does not contain #

Check with the Administrator that the following php command file exists:

/usr/bin/php

7.11 java.lang.OutOfMemoryError: unable to create new native thread

Please refer to [Could not reserve enough space for object heap](#) topic.

7.12 Invalid username and/or password

Problem:

When login to NGASI installed under Windows, the following error message is displayed:

Invalid username and/or password, please type it manually again.

Solution:

Login with the password "coolgeek". Sometimes NGASI is unable to read the system password of the user, so a default password is created (coolgeek). After login, set the password to the correct system password via the "User Profile" feature.

7.13 client denied by server configuration

If using Apache as a proxy to the application server, and you are seeing the following in your Browser:
client denied by server configuration

Have your Administrator check the following:

In the httpd.conf, see if the following appears in the mod_proxy configuration:

```
<Directory />  
    AllowOverride None  
    Order Deny,Allow  
    Deny from all  
</Directory>
```

If so, then comment out (or remove) the 'Deny from all' directive, which is causing very strict default access control for mod_proxy

7.14 Forbidden

If using Apache as a proxy to the application server, and you are seeing the following in your Browser:

Forbidden
You don't have permission to access / on this server.

It may suggest the configured proxy module (http or ajp) is not installed.

Have your Administrator try changing the protocol in the Proxy Server Configuration and then reset your web mapping.

7.15 Bad Gateway

If using Apache as a proxy to the application server, and you are seeing the following in your Browser:

Bad Gateway

The proxy server received an invalid response from an upstream server.

It may suggest the httpd.conf is missing the NameVirtualHost setting for the VirtualHosts.

Have your Administrator try setting the NameVirtualHost to match the VirtualHosts in the Proxy Server Configuration and then reset your web mapping.

7.16 503 - Service Temporarily Unavailable

Browser Error:

Service Temporarily Unavailable

The server is temporarily unable to service your request due to maintenance downtime or capacity problems. Please try again later.

Make sure the Application Server is Turned On and is Running.

7.17 The page cannot be displayed because an internal server error has occurred

If after setting the Web Mappings, you see the following Error when browsing to the Domain:

The page cannot be displayed because an internal server error has occurred

It means the default Tomcat for the Web Control Panel (such as Plesk) being used has been enabled for the account.

The Control Panel's Tomcat support must be disabled as it conflicts with NGASI's support.

7.18 404 - /jakarta/isapi_redirect.dll

If using Plesk for Windows, and an Account user enters the following URL:
<http://yourdomain.com/examples/>

And the following ERROR is displayed on the browser:

HTTP Status 404 - /jakarta/isapi_redirect.dll

type Status report

message /jakarta/isapi_redirect.dll

description The requested resource (/jakarta/isapi_redirect.dll) is not available.

Solution

System Administrator should uninstall the Plesk installed version of Tomcat/JDK by following the steps outlined below:

go to Windows Control Panel -> Programs and Features -> Modify Plesk Install -> Remove Tomcat/JDK
Reboot Server

The NGASI Web Server Mapping for the user account will have to be Disabled, and then Re-Enabled afterwards.

7.19 Browser hangs - IIS

Problem: Browser hangs for IIS front-ended Application Server

Cause: This may be a result of Protecting the URL through IIS.

Solution: Remove IIS password protection and implement Form based authentication through the Application Server.

You may also have your Administrator set your account to use Apache instead of IIS following the instructions in the NGASI Admin Guide.

7.20 /usr/saase/bin/saase.sh: No such file or directory

If using Plesk for Linux, and you get the following Error when trying to install Application Server:
/usr/saase/bin/saase.sh: No such file or directory

Solution:

You are getting that error because the user has a chroot (sandbox) shell access. You need to login into Plesk and set shell access to /bin/sh and it should work.

7.21 500 Error - IIS

Problem:

If you continuously get a 500 Error from IIS after mapping your Application Server.

Solution:

Have your administrator remove the following directory:

- 1) Stop your Web site in the IIS Manager
- 2) delete or rename C:\inetpub\vhosts\yourdomain.com\appservers\iisconnector
- 3) Finally remap the Application Server.

7.22 404 /plesk-stat/webstat/

Please refer to [Plesk Web Statistics](#).

Endnotes 2... (after index)

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