



Tivoli<sup>®</sup> Business Systems Manager  
*Intelligent Monitoring for NetIQ AppManager<sup>®</sup>*  
*Release Notes*

*Version 1.5*

GI10-5791-00





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## **Tivoli Intelligent Monitoring for NetIQ AppManager Release Notes Version 1.5**

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## Preface

This document provides information about Tivoli® Intelligent Monitoring for NetIQ AppManager® (Intelligent Monitoring) Version 1.5 .

This product forwards NetIQ AppManager events to Tivoli Business Systems Manager database, maintaining the related database up-to-date through discoveries performed on a timely basis.

## Who Should Read This Guide

The target audience for this guide is NetIQ AppManager administrators who want to check the availability of AppManager resources through Tivoli Business Systems Manager.

To make effective use of the product you require knowledge and practical experience of the following:

- NetIQ AppManager
- Tivoli Business Systems Manager
- Windows NT®

## Prerequisite and Related Documents

To use the information in this document, you should be familiar with the following manuals:

- *Tivoli Business Systems Manager Installation and Configuration Guide*
- *Tivoli Business Systems Manager User's Guide*
- *Tivoli Business Systems Manager Distributed Overview*
- *NetIQ AppManager User's Guide*

## What This Guide Contains

This guide contains the following sections:

- Chapter 1, “Overview of Intelligent Monitoring”  
Provides an overview of the product and how it replicates the AppManager environment in the Tivoli Business Systems Manager.
- Chapter 2, “Installing Intelligent Monitoring”  
Provides you with the instructions necessary to install Intelligent Monitoring.
- Chapter 3, “Using Event Discovery”  
Describes the event discovery function of Intelligent Monitoring and explains how to start it.
- Appendix A, “Command Reference”  
Describes Intelligent Monitoring commands you can issue from the command prompt and explains how to use them.
- Appendix B, “Mapping NetIQ AppManager Events”  
Explains how NetIQ AppManager event severity levels are mapped in Tivoli Business Systems Manager database.

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- Appendix C, “Known Limitations and Workarounds”  
Describes known defects of Intelligent Monitoring. Where applicable and known, suggested workarounds are identified.

## Conventions Used in This Guide

The guide uses several typeface conventions for special terms and actions. These conventions have the following meaning:

<b>Bold</b>	Commands, keywords, file names, authorization roles, Web addresses, or other information that you must use literally appear like <b>this</b> , in <b>bold</b> .
<i>Italics</i>	Variables and values that you must provide appear like <i>this</i> , in <i>italics</i> . Words and phrases that are emphasized also appear like <i>this</i> , in <i>italics</i> .
<b>Monospace</b>	Code examples, output, and system messages appear like <code>this</code> , in a monospace font.

## Software Requirements

To use Intelligent Monitoring, the following software installed and running:

- Windows 2000, or Windows NT 4.0 Service Pack 6, or higher.
- NetIQ AppManager Version 4.0 Agent.
- All software required as a prerequisite of NetIQ AppManager, because this product is installed together with NetIQ AppManager software.
- Tivoli Business Systems Manager Version 1.5 with a database version that supports AppManager extension.
- Tivoli Business Systems Manager Common Listener.
- IBM JRE 1.3.
- The most recent system DLLs. If your DLLs are not updated, download the file **vcredist.exe** from the following Web site: <http://www.msdn.microsoft.com/default.asp>.
- The ODBC driver for Microsoft Access 2000 must be installed. If it is not, run the **mdac\_typ.exe** file that is provided with Microsoft Data Access Components 2.1, at <http://www.microsoft.com/data>.

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To access most of the documentation, you need an ID and a password. To obtain an ID for use on the support Web site, go to <http://www.tivoli.com/support/getting/>.

Resellers should refer to <http://www.tivoli.com/support/smb/index.html> for more information about obtaining Tivoli technical documentation and support.

Business Partners should refer to “Ordering Publications” on page vii for more information about obtaining Tivoli technical documentation.



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- Send an e-mail to **[support@tivoli.com](mailto:support@tivoli.com)**.
- Customers in the U.S. can call **1-800-TIVOLI8 (1-800-848-6548)**.
- Customers outside the U.S. should refer to the Tivoli Customer Support Web site at **<http://www.tivoli.com/support/locations.html>** for customer support telephone numbers.

When you contact Tivoli Customer Support, be prepared to provide the customer number for your company so that support personnel can assist you more readily.

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## 1

# Overview of Intelligent Monitoring

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This chapter gives an overview of Intelligent Monitoring and how it enables the integration of NetIQ AppManager with Tivoli Business Systems Manager.

Intelligent Monitoring communicates with Tivoli Business Systems Manager through the Common Listener. Data is sent by Intelligent Monitoring to the Common Listener, which then updates Tivoli Business Systems Manager database accordingly. For more information about the Common Listener, refer to the documentation provided with it.

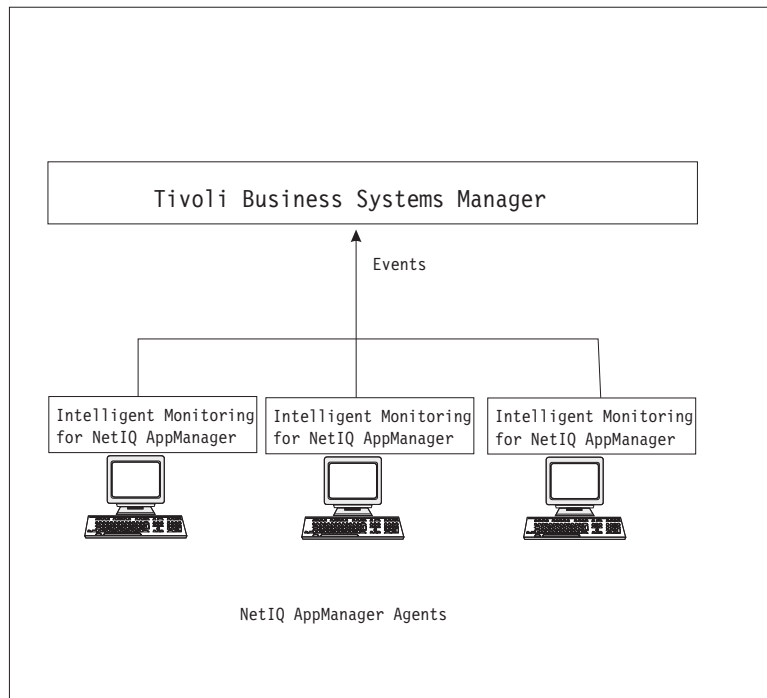
Intelligent Monitoring operates through the event discovery process. This process collects NetIQ AppManager events and routes them to Tivoli Business Systems Manager database

## Event Discovery Process

Intelligent Monitoring uses *event discovery* to collect and forward AppManager events to Tivoli Business Systems Manager.

On a timely basis, the event discovery process collects the events generated by the AppManager agents, and updates Tivoli Business Systems Manager database accordingly.

The following figure depicts the whole process of collecting data and transmitting it to Tivoli Business Systems Manager database.



*Figure 1. Data transfer from NetIQ AppManager to Tivoli Business Systems Manager*

# 2

## Installing Intelligent Monitoring

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This chapter provides you with the instructions necessary to install Intelligent Monitoring on your system.

You have to install Intelligent Monitoring on each workstation that you want to monitor through Tivoli Business Systems Manager and that runs NetIQ AppManager.

Before you install Intelligent Monitoring, ensure that you have satisfied the software and hardware requirements listed below.

### Related Documents

During the installation of Intelligent Monitoring, you might need to refer to the following books:

- *Tivoli Business Systems Manager Installation and Configuration Guide*
- *Tivoli Business Systems Manager User's Guide*
- *Tivoli Business Systems Manager Distributed Overview*
- *NetIQ AppManager User's Guide*

### Software Requirements

To use Intelligent Monitoring, you must have the following software installed and running:

- Windows 2000, or Windows NT 4.0 Service Pack 6, or higher.
- NetIQ AppManager Version 4.0 Agent.
- IBM JRE 1.3.
- Tivoli Business Systems Manager Version 1.5, with a database version that supports AppManager extension.
- Tivoli Business Systems Manager Common Listener.
- All software required as a prerequisite of NetIQ AppManager, because this product is installed together with NetIQ AppManager.
- The most recent system DLLs. If your DLLs are not updated, download the file **vc redistrib.exe** from the following Web site: <http://www.msdn.microsoft.com/default.asp>.
- The ODBC driver for Microsoft Access 2000 must be installed. If it is not, run the **mdac\_typ.exe** file that is provided with Microsoft Data Access Components 2.1, at <http://www.microsoft.com/data>.

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## Hardware Requirements

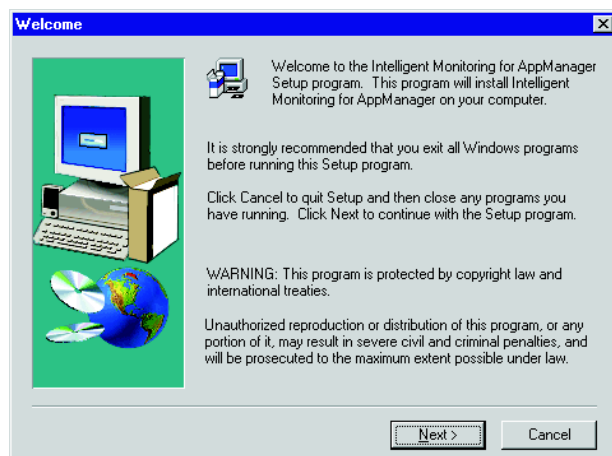
The minimum hardware requirements for Intelligent Monitoring are listed in the following table.

Hardware	Minimum Required
Disk space	5 MB
RAM	96 MB
Processor	Pentium® II 300 MHz

## Installation Procedure

To install Intelligent Monitoring, perform the following procedure:

1. Download the **1.5-BSM-0013** patch, from Tivoli Business Systems Manager directory, where patches are stored.
2. Expand the 1.5-BSM-0013.tar file in a temporary directory, like **C:\Tempinstall**.
3. Open the temporary directory and double click the **Setup.exe** file. The Welcome dialog opens.

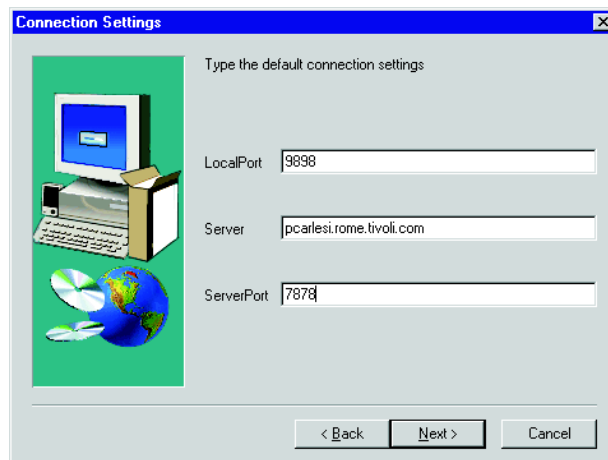


4. Click **Next**. The Choose Destination Location dialog opens.



5. If you do not want to install the product in the default folder, browse to a destination directory.
6. The Connection Settings dialog opens. Enter the following information and click **Next**:
 

<b>Local Port</b>	The workstation port number used by Intelligent Monitoring to communicate with Common Listener.
<b>Server</b>	The IP address of the server where Common Listener is installed.
<b>Server Port</b>	A port of the server where Common Listener is installed. This must be the same port that Common Listener uses to receive data from Intelligent Monitoring. For more information about Common Listener, refer to the relevant documentation.



7. Restart the computer, when required.

Now you have successfully installed Intelligent Monitoring.

If you want to change any of the settings specified during the installation, or you need to customize other setup values, see Appendix B “wimasetup” on page 11 for more information.

## Configuring the Event Discovery

After completing the installation, but before starting the event discovery for the first time, you have to configure it, specifying the subnet mask of the network the host belongs to. To do so, launch the setup command with the corresponding option:

```
wimasetup -e -subnetmask <subnetmask>
```

For more information about this command, see “wimasetup” on page 11.

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# 3

## Using Event Discovery

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This chapter describes the use of Intelligent Monitoring event discovery. Event discovery collects the events from AppManager agents and transmits them to Tivoli Business Systems Manager.

### Event Discovery

Event discovery collects events from each AppManager agent on which it is installed. Then, it forwards to Tivoli Business Systems Manager the event related information, such as message severity and message text. The message severity indicates the error level of the event, while the message text contains a description of the event.

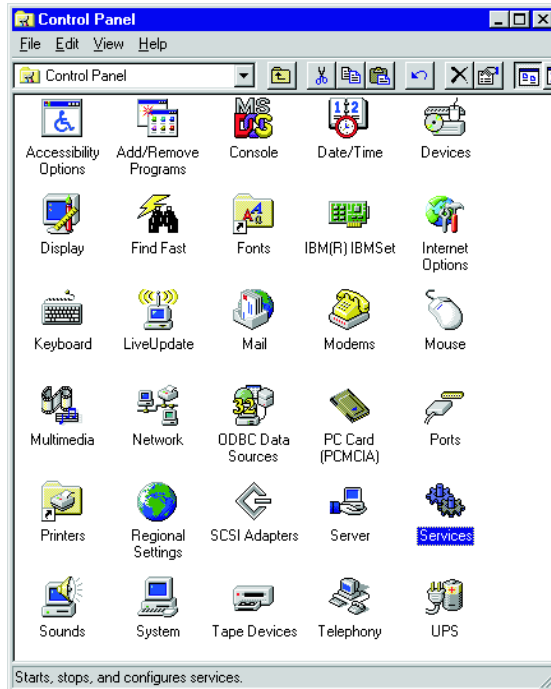
On Tivoli Business Systems Manager side, each event is associated to the object that represents the agent that has generated it.

On a timely basis, the event discovery process refreshes the events in Tivoli Business Systems Manager database. The time interval that elapses between two successive event discoveries is set to 60 seconds by default. However, you can customize it using the corresponding command from the command prompt. For more information about setup customizing commands, see Appendix A, “wimasetup” on page 11.

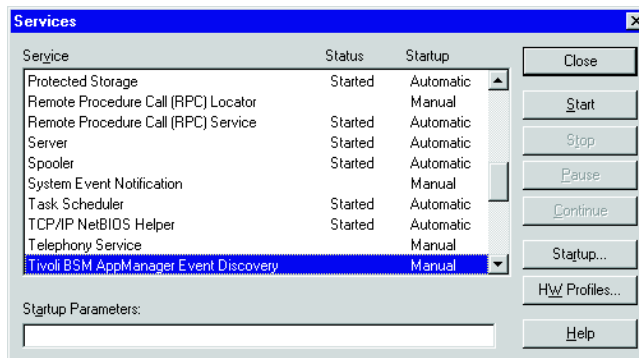
### Starting the Event Discovery Service

To start the event discovery service, perform the following procedure:

1. From Windows tool bar, select **Start** —> **Settings** —> **Control Panel**. The Control Panel window opens.



2. Double click the **Services** icon. The Services panel opens.



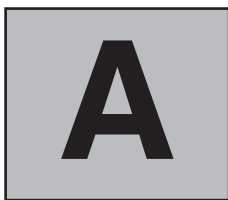
3. From the **Service** list, select **Tivoli BSM AppManager Event Discovery** and click **Start**.

**Note:** Event discovery must be always active when NetIQ AppManager is operating. The service does not keep track of the changes that take place when the event discovery is not active. For example, if some events occur when event discovery service is not running, you do not see those events on Tivoli Business Systems Manager side when you start the service again.

## Viewing Event Information

Intelligent Monitoring maps AppManager events into Tivoli Business Systems Manager database, and associates them with the icon of the agent that generated them.

Double-click that icon to display event related information.



## Command Reference

---

This appendix describes the Intelligent Monitoring commands, which you can issue from the command prompt, and explains how to use them.

The Intelligent Monitoring commands and the functions you can perform with them, are given in the following table:

Command	Function
<b>wimtraceset</b>	Sets the trace options of Intelligent Monitoring to the specified values.
<b>wimasetup</b>	Configures the integration between Intelligent Monitoring and Tivoli Business Systems Manager

---

## wimtraceset

This command sets the trace options.

### Syntax

The usage of this command is the following:

```
wimtraceset <tracelevel> <maxsize>
```

### Description

This command sets the trace level to the value entered for *level*. The value for *level* can be one of the following:

- |          |   |
|----------|---|
| <b>0</b> | Only errors are stored in the log file. This is the default value. For performance reasons, Tivoli recommends that you do not change this value unless you are experiencing problems that you want to report to Customer Support. |
| <b>1</b> | Only warnings and errors are stored in the log file.  |
| <b>2</b> | All steps of the monitoring process are stored in the log file.   |
| <b>3</b> | Verbose mode: all operations performed during monitoring are stored in the log file.  |

The output from the trace is saved in the log file. The maximum size of the file is defined by the *size* parameter. The size of the file must be defined in bytes.

### Examples

The trace file logs only errors and its maximum size is around **1 MB**.

```
wimtraceset 0 1000000
```

## wimasetup

Configures the integration with Tivoli Business Systems Manager.

### Syntax

The usage of this command for event discovery is the following:

```
wimasetup [-log (on [-lf <Log File Name>] | off)]
           [-reqport <Request Port Number>]
           [-resport <Response Port Number>]
           [-svrport <Server Port Number>]
           [-svraddress <Server Address>]
           [-lqs (file | memory)]
           [-rqs (file | memory)]
           [-refresh <Refresh Time>]
           [-subnetmask <Subnet Mask>]
```

```
wimasetup -h
```

### Description

This command configures the integration with Tivoli Business Systems Manager. You can use this command to customize the settings you have specified during the installation procedure and some general integration settings. To display the current values of the variables that can be set with this command, launch the command without specifying any options. An example of the output is the following:

```
wimasetup
Logging Mode           true
Log File Name          AppManagerEventLst_LoggingModeFile.log
Request Port Number    9898
Response Port Number   9898
Server Port Number     8082
Server Address         server
Local Queue Store      memory
Remote Queue Store     file
Refresh Time           60
```

### Options

- log on**           The collected data is logged in a file, instead of being transmitted directly to Tivoli Business Systems Manager. If you do not specify a file name, data is logged in a file called **AppManagerEventLst\_LoggingModeFile.log** and located in the product directory.
- log off**          The collected data is not logged in any file. It is directly transmitted to Tivoli Business Systems Manager.
- lf <logfilename>**  
This option is valid only if log option is set to on. Here you specify the file name where you want to log your data. You can also specify an absolute path. If you do not specify a path, the log file is created in the directory where the command is located.
- reqport <Request Port Number>**  
This is the workstation port number used by Intelligent Monitoring to receive requests from Common Listener.
- resport <Response Port Number>**  
This is the workstation port number used by Intelligent Monitoring to

---

receive responses by Common Listener. It can be the same port specified in the **reqport** option, if you use the same port to receive requests and responses.

**-svrport** <Server Port Number>

This is a port of the server where Common Listener is installed. It must be the same port that Common Listener uses to receive data from Intelligent Monitoring.

**-svraddress** <Server Address>

This is the IP address of the server where Common Listener is installed.

**-lqs (memory | file)**

This option enables you to choose where to store the incoming queued data. If you do not specify this option, the default value is **file**.

**memory** Incoming data is kept in memory. The process is relatively fast, but if the application fails, you lose data.

**file** Incoming data is kept in a file. The process is relatively slow, but if the application fails, you can still retrieve the data.

**-rqs (memory | file)**

This option enables you to choose where to store the outgoing queued data. If you do not specify this option, the default value is **file**.

**memory** Outgoing data is kept in memory. The process is relatively fast, but if the application fails, you lose the data.

**file** Outgoing data is kept in a file. The process is relatively slow, but if the application fails, you can still retrieve the data.

**-refresh** <Refresh time>

This is the time interval you want to elapse between two successive discoveries. It is expressed in seconds. The default value for this option is **60**.

**-subnetmask** <Subnet Mask>

Subnet mask of the network the host belongs to.

## Examples

- The following command specifies that the collected data is logged in a file named **myFile.log**, the server port number is **8082** and IP address is **tbsmserver.rome.tivoli.com**.

```
wimasetup -log on myFile.log -svrport 8082 -svraddress tbsmserver.rome.tivoli.com
```

- The following command specifies that incoming and outgoing queued data is stored in **memory**. Refresh time is set to **40** seconds.

```
wimasetup -lqs memory -rqs memory -refresh 40
```

# B

## Mapping NetIQ AppManager Events

This appendix describes how NetIQ AppManager event severity levels are mapped in Tivoli Business Systems Manager database.

The first column of the following table lists the event severity levels defined by NetIQ AppManager. On Tivoli Business Systems Manager side, each severity level is represented by two values, which are listed in the two other columns of the table.

The values used by Tivoli Business Systems Manager to define the severity of an event are the following:

- Alert State

- Priority

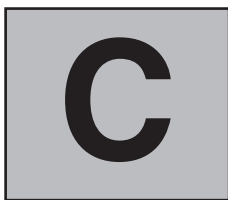
**Alert State** Defines the degree of severity of an event, where the higher the value, the more severe the event. Values from 1 to 3, inclusive.

**Priority** Defines the urgency of action required by an event, where the higher the value, the less urgent the action. Values from 1 to 5, inclusive.

Event Severity Value	Alert State	Priority
Less or equal to 1	3	1
2 to 4	3	2
5 to 10	3	3
11 to 16	2	3
17 to 22	2	4
23 to 28	1	4
29 to 34	1	4
35 to 40	1	5
over 40	2	5

---





## Known Limitations and Workarounds

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This section describes known defects of Intelligent Monitoring. Where applicable and known, suggested workarounds are identified. Note that this may not be a complete list of defects.

Current defects, limitations and workarounds for Intelligent Monitoring include:

1. Event discovery forwards to Tivoli Business Systems Manager event related message texts provided by NetIQAppManager. In Tivoli Business Systems Manager database message texts have a maximum length of 128 characters. If the original message text is longer than this, Intelligent Monitoring truncates it.
2. The validity of the parameters associated to the following commands  
`wimasetup`, `wimtraceset`  
is not checked. Therefore, invalid parameters are accepted.
3. When you uninstall the product, the entry that sets the path in the `autoexec.bat` file is not removed. This can cause problems when you reinstall the product. **Workaround:** edit the `autoexec.bat` file manually, deleting the entry that sets the path for Intelligent Monitoring.





# Error Messages

---

This appendix explains the messages that can be issued by a workstation Intelligent Monitoring is running on.

Messages are listed in ascending numeric order.

## Identifying a Message

Messages are of different type but are all identified in the same way. The following example shows a typical message and explains its identifying components.

Identity	Message
IMA0001E	Invalid subnet mask was specified.

**IMA** This prefix identifies the message as belonging to Intelligent Monitoring for Unicenter TNG.

**0005** The unique serial number of the message.

**E** Is the type of message and can be:

- I** **Information messages** provide feedback about something that has happened in the product or system that may be important. These messages also give guidance when you are requesting a specific action from the product.
- W** **Warning messages** call your attention to an exception condition that is not necessarily an error but may cause problems if not attended to.
- E** **Error messages** indicate that an action cannot be completed because of a user or system error. These error messages always require user response.

## Notation

Some messages, especially information and warning messages, are multi-purpose. The same basic text can contain different strings such as different command names or application names, according to the way the application was behaving when the message was generated. These messages are shown in the following sections with the string identity displayed in *italics* at the appropriate part of the message.

---

## Messages

The following message can be displayed.

---

<b>IMA0001E</b>	<b>Invalid subnet mask was specified.</b>
	<b>Explanation:</b> The subnet mask you have specified is incorrect.
	<b>User Response:</b> Specify a valid subnet mask.





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