



analytics Pack

Analytics Pack subsystem. User Guide

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Table of contents

1	Introduction	3
2	General information about Analytics Pack subsystem	4
3	Installing, restoring and repairing of Analytics Pack subsystem.....	5
3.1	Installation of the Analytics Pack subsystem	5
3.2	Restoring the Analytics pack subsystem	10
3.3	Analytics Pack subsystem removal	11
4	Configuring the Analytics Pack subsystem.....	14
4.1	Procedure of configuring the Analytics Pack subsystem.....	14
4.2	Installing required program modules to create Visitors behavior analysis reports	14
4.2.1	Local configuration	14
4.2.2	Remote generation of statistics on the main server	14
4.2.3	Multilevel generation of statistics	14
4.3	Configuring the RabbitMQ application	15
4.4	Configuring the RabbitMQ user	20

1 Introduction

Analytics Pack User Guide is a reference guide for installation and configuration specialists of the *Analytics Pack* subsystem.

This Guide contains:

1. General information about *Analytics Pack* subsystem.
2. Installing of *Analytics Pack* subsystem.
3. Restoring of *Analytics Pack* subsystem.
4. Removing of *Analytics Pack* subsystem.
5. Configuring of *Analytics Pack* subsystem.

2 General information about Analytics Pack subsystem

The *Analytics Pack* subsystem is designed to create following reports in the *Intellect Web Report System* subsystem:

1. Heat map.
2. Customer activity statistics.

The **Heat map** web-report decides the issue of quick and quality comparison of customer activity in different zones of monitored area.

The **Customer activity statistics** web-report is used to inspect the change of customer activity over time and quantitatively estimate activity in different zones of monitored area.

The *Analytics Pack* subsystem is required for correct operation of the **Heat detection** program module.

3 Installing, restoring and repairing of Analytics Pack subsystem

3.1 Installation of the Analytics Pack subsystem

Before the *Analytics Pack* installation perform the *Intellect* software package installation.

Note.

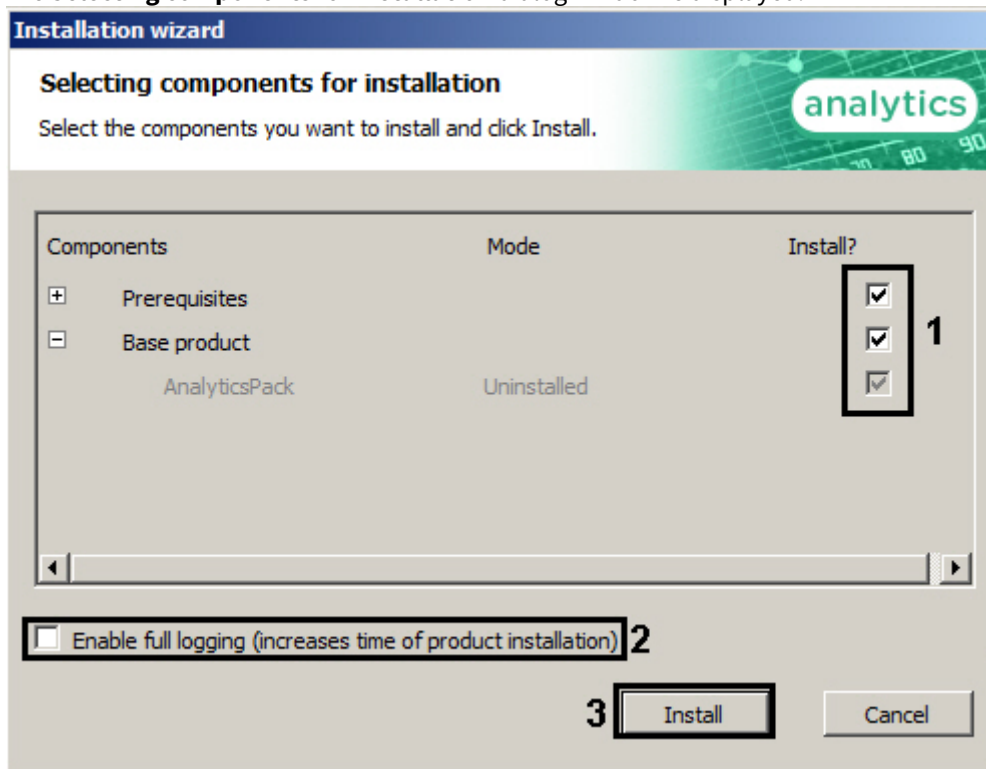
Language of installer and installation language are defined on the basis of language which was in use while base *Intellect* installation. Change of localization language with the help of language packs after base *Intellect* installation will not influence on language of *Analytics Pack* installation.

Installation of the *Analytics Pack* subsystem is performed as follows:

1. Start the *setup.exe* file from the archive of *Analytics Pack* installer package.



2. The **Selecting components for installation** dialog window is displayed.

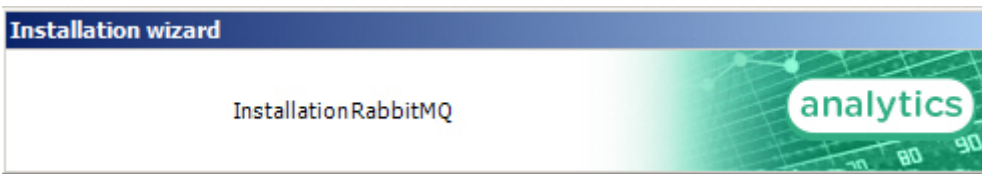


3. Set the checkboxes next to the components that are to be installed (1).

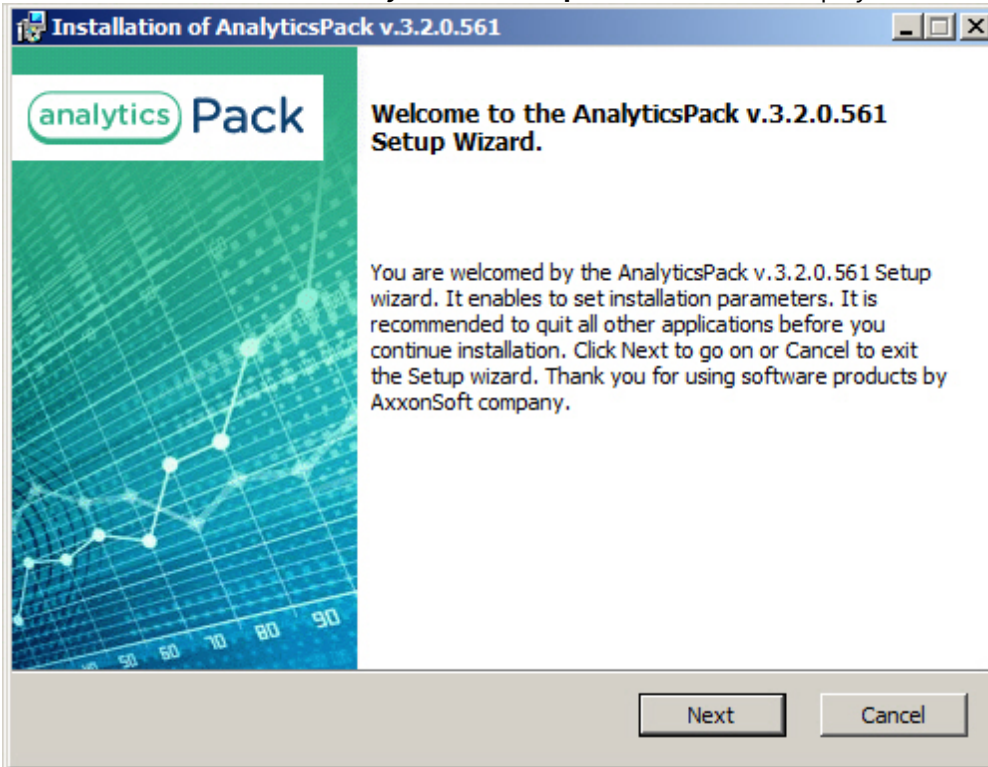
Note.

All offered components are recommended.

4. To log all installation events, set the **Enable full logging (increases time of product installation)** checkbox (2).
5. Click **Install** button (3).
The selected components are automatically installed.

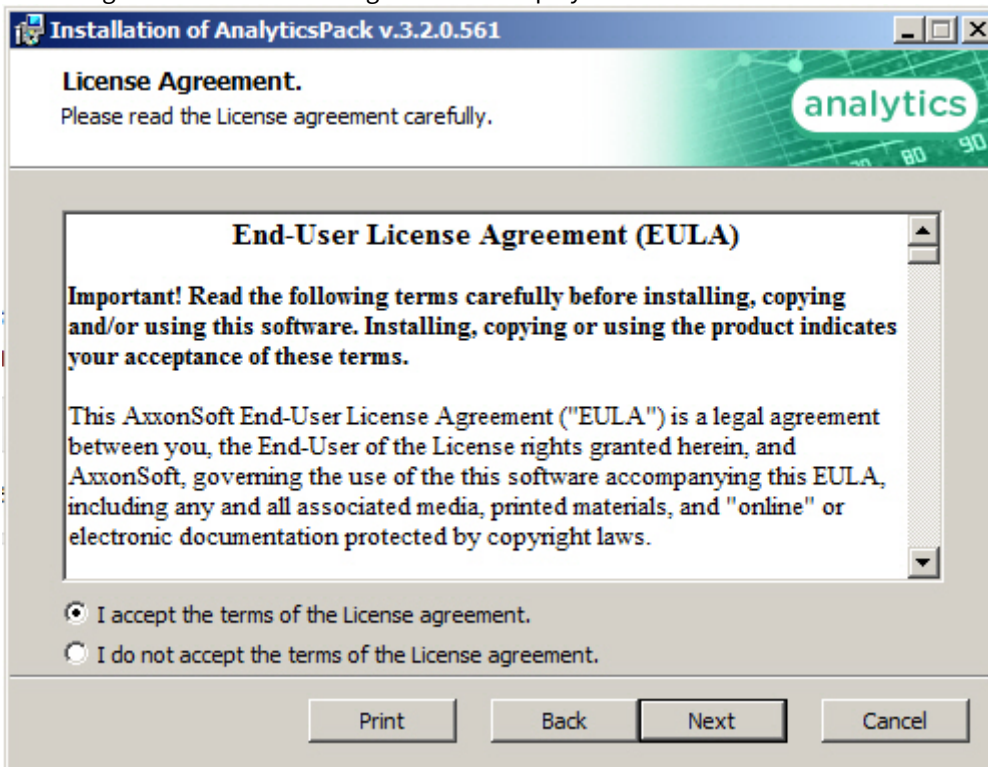


After this the **Welcome to the Analytics Pack Setup Wizard** window is displayed.



6. Click the **Next** button.

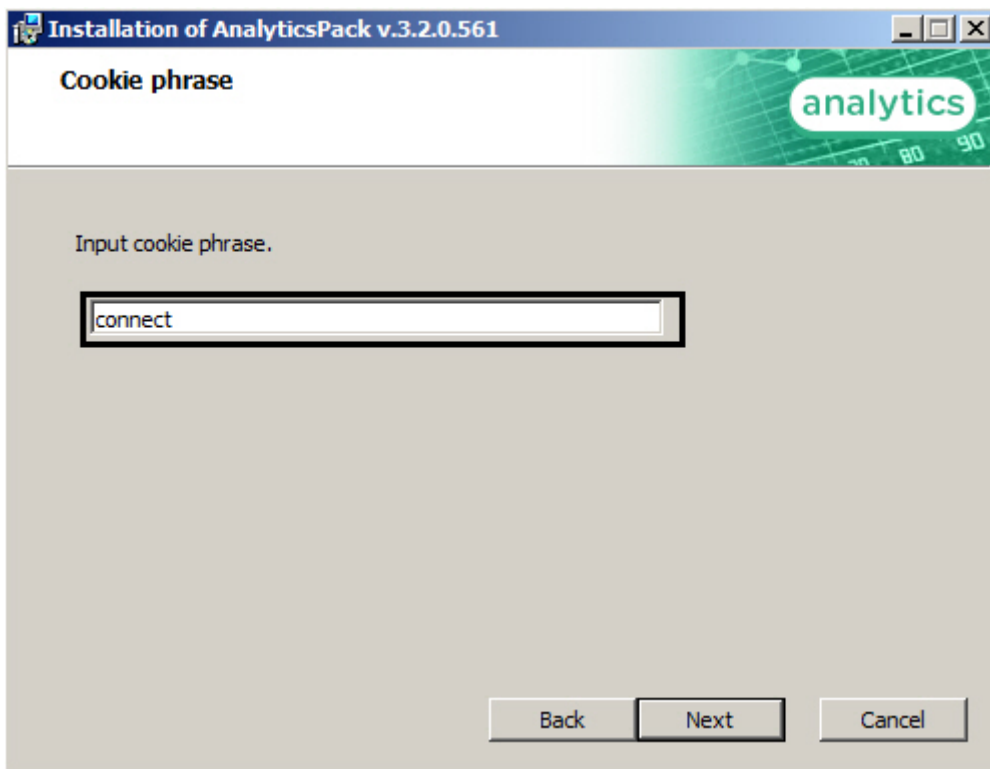
The dialog window with license agreement is displayed.



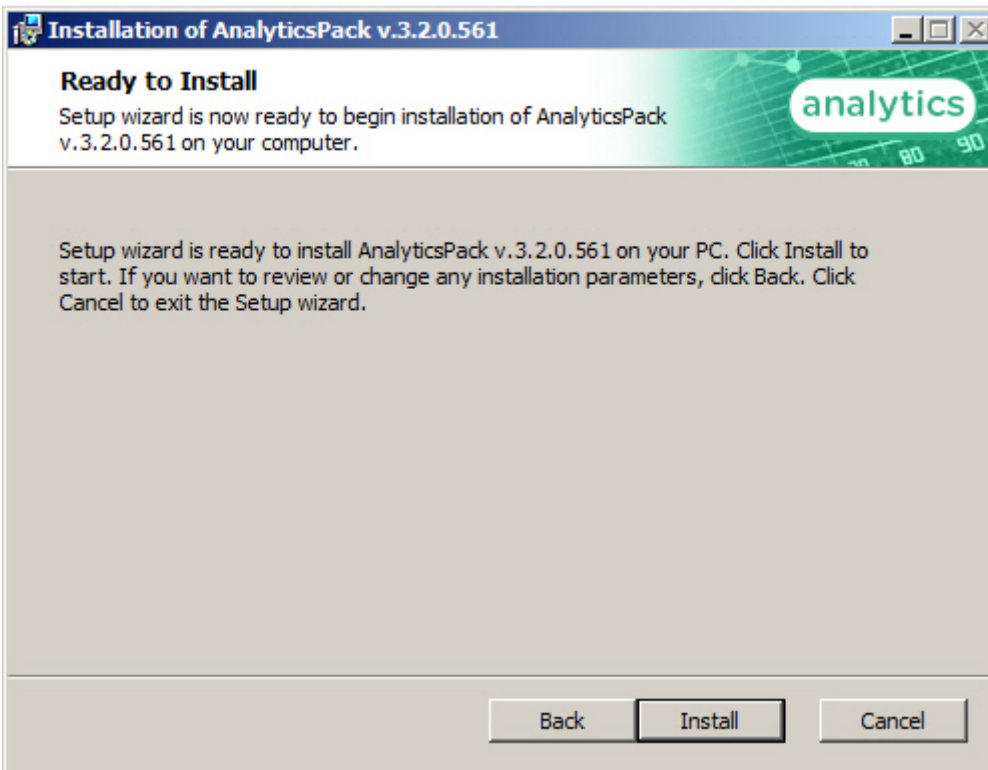
- In the next dialog window accept or decline the terms of the License agreement about using of *Analytics Pack* technology. Set the **I accept the terms of the License agreement** checkbox and click the **Next** button. To print the agreement click the **Print** button.
- In the opened **Cookie phrase** window enter the cookie phrase which will be in use to connect servers and click the **Next** button.

Attention!

For correct working of *Analytics Pack* subsystem specify the same cookie phrase on all servers where the *Analytics Pack* is installed.

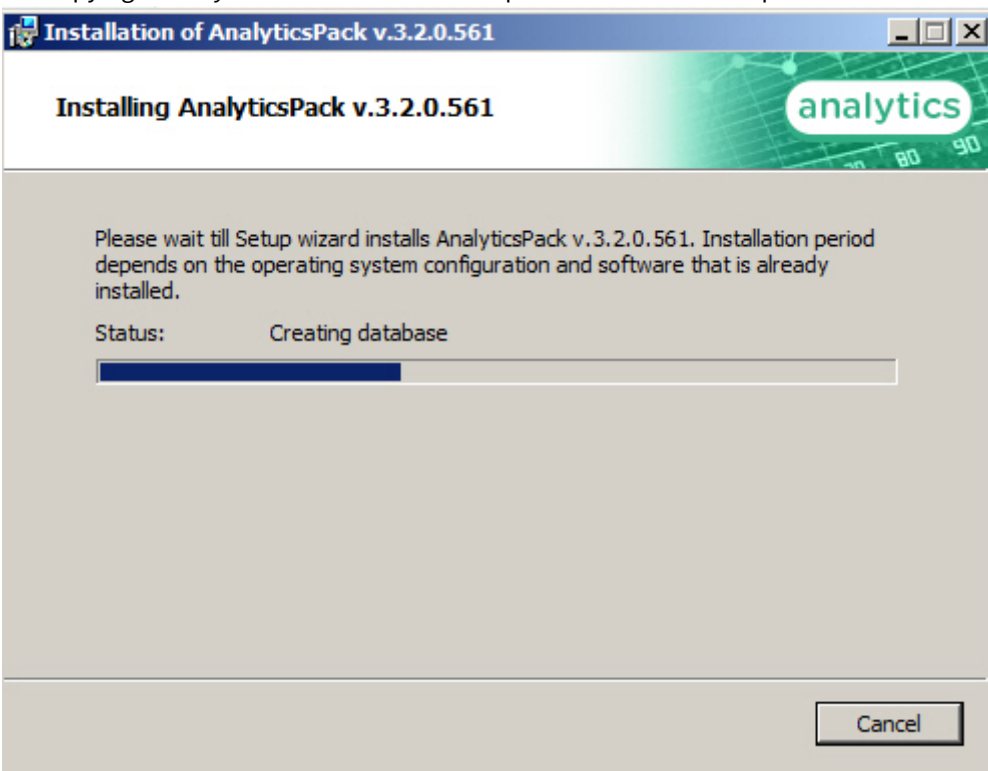


- In the **Ready to install** dialog window run the process of *Analytics Pack* installation. To run the installation process click the **Install** button.



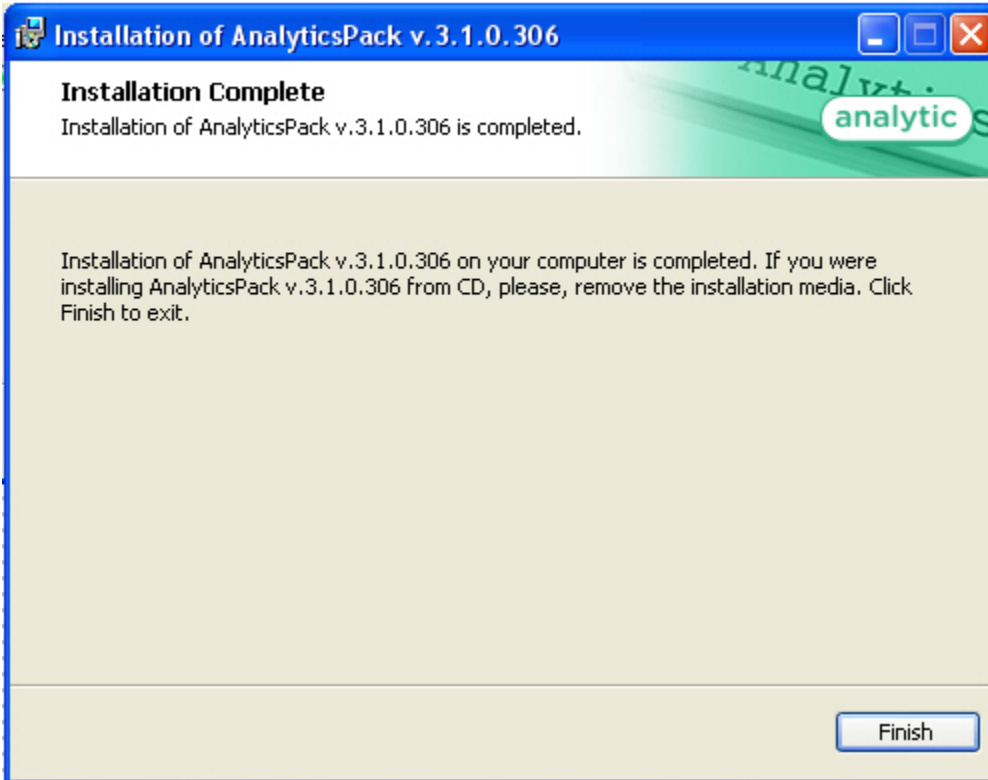
To change settings click the **Back** button.

10. The copying of *Analytics Pack* files on the computer hardware will be performed.

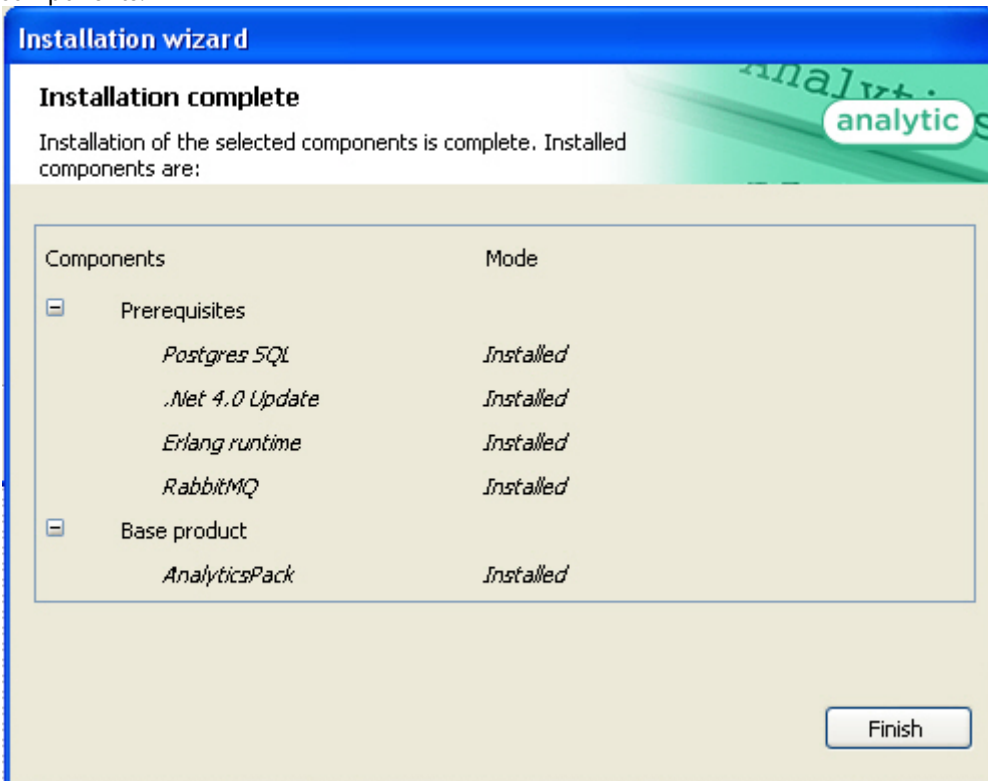


Wait for the completion of copying files and next updating of installation box.

11. Message that *Analytics Pack* installation on the hardware is finished is displayed in a new dialog box.



12. To complete the wizard working click the **Ready** button. Then the installation wizard box is displayed, containing the information on the mode (installed or not) of *Analytics Pack* components.



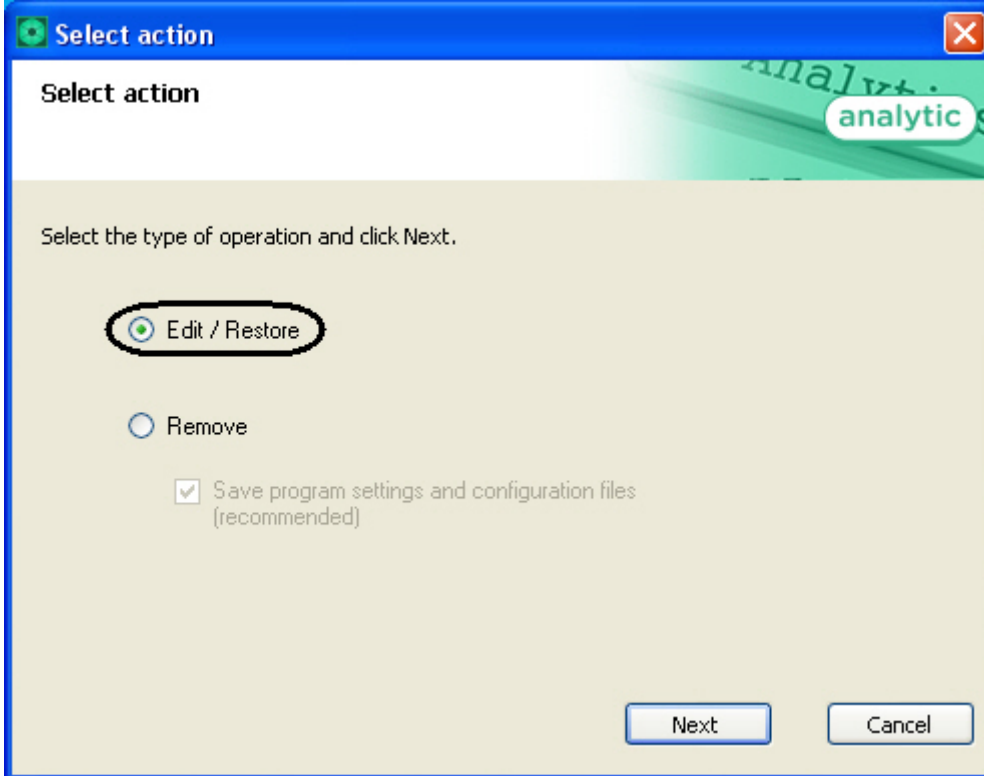
13. Click the **Finish** button.

The *Analytics Pack subsystem* installation is finished.

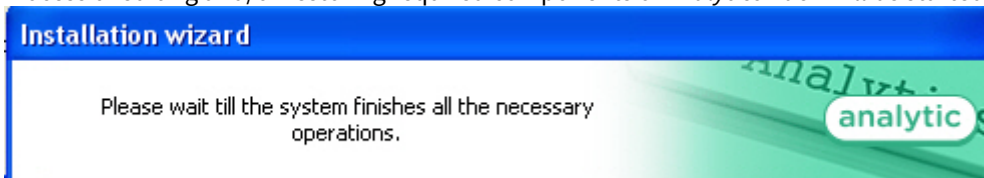
3.2 Restoring the Analytics pack subsystem

To add, remove or restore some *Analytics Pack* components, do the following:

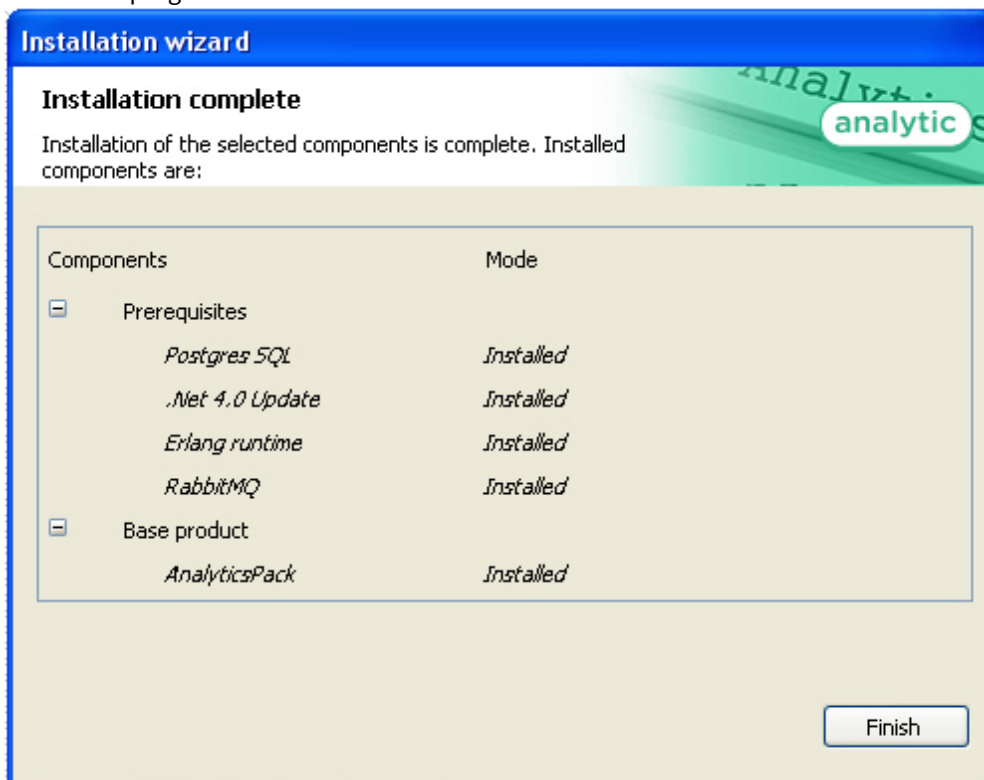
1. Run the **setup.exe** executive file installer of installed *Analytics Pack* or select the **Add or Remove Programs** item through the **Start => Control Panel** menu and click the **Edit/Remove** button next to the name of *Analytics Pack* program.
2. In the **Select action** window select set the **Edit/Restore** checkbox and click the **Next** button.



3. Process of editing and/or restoring required components of *Analytics Pack* will be started.



4. When process of *Analytics Pack* changing is completed the **Installation completed** dialog window is displayed. To exit installation program click the **Finish** button.



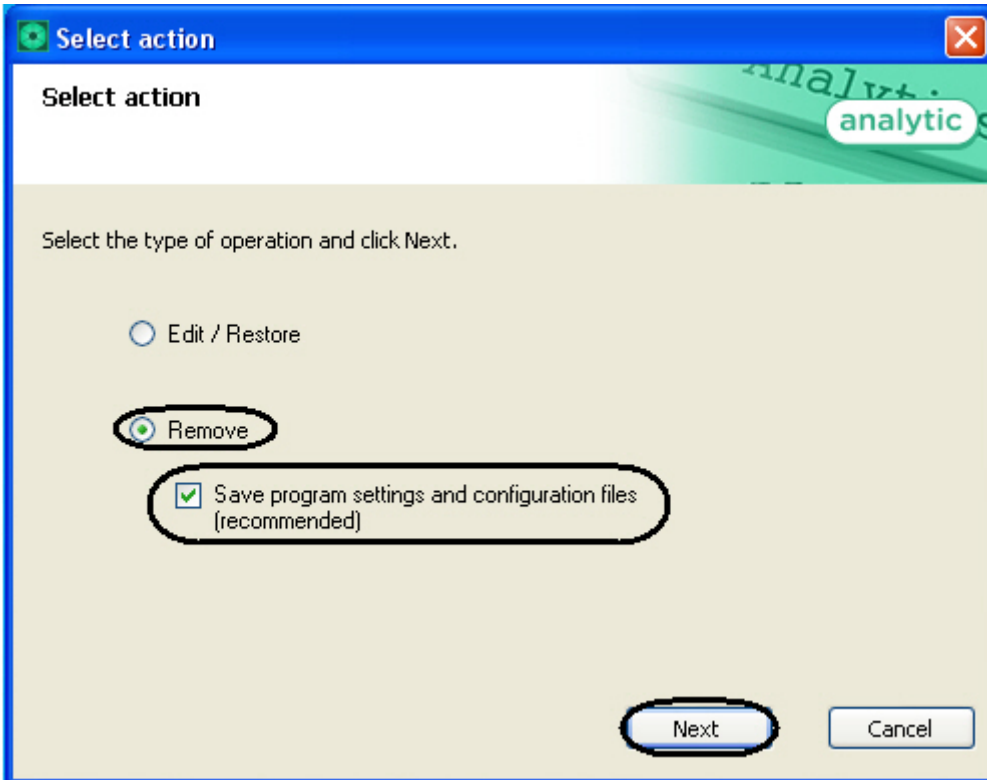
Change of *Analytics Pack* subsystem is completed.

3.3 Analytics Pack subsystem removal

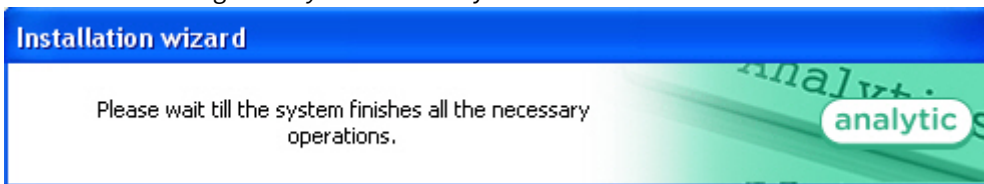
To remove *Analytics Pack* subsystem, do the following:

1. Run the setup.exe file from installer of installed *Analytics Pack* or select the **Add or Remove Programs** item through the **Start => Control Panel** menu and click the **Edit/Remove** button next to the name of *Analytics Pack* program.
2. In the **Select action** window set the **Remove** checkbox.
3. Set the **Save program settings and configuration files (recommended)** checkbox to save the *Analytics Pack* subsystem settings.

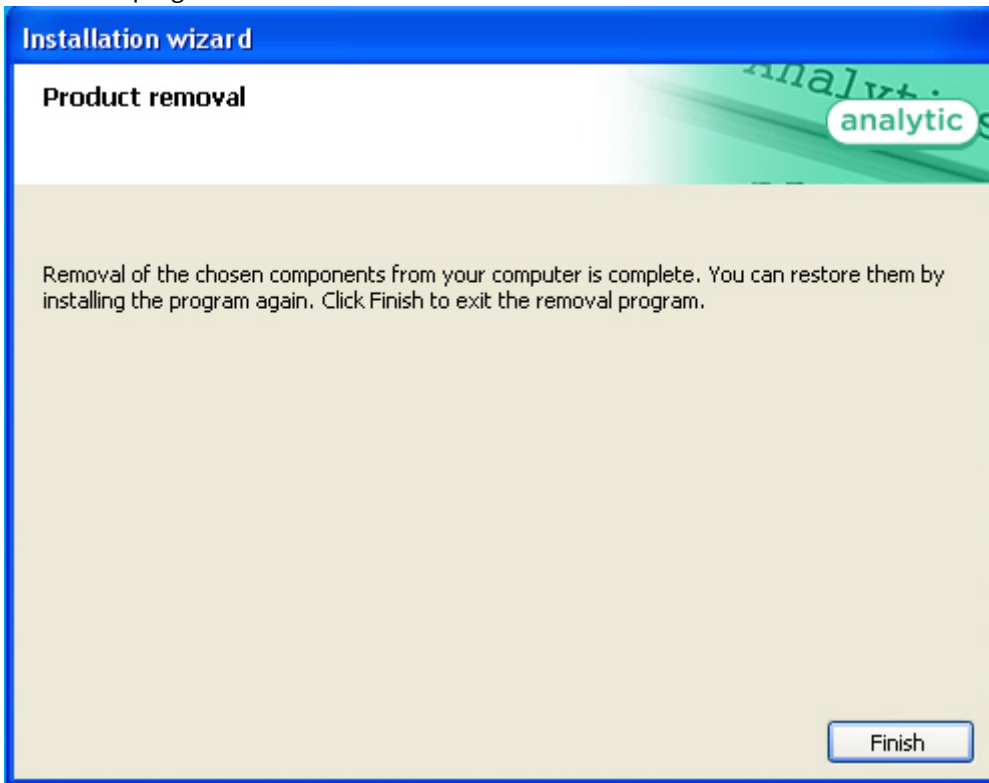
4. Click the **Next** button.



5. Process of removing of *Analytics Pack* subsystem will be started.



- When process of *Analytics Pack* changing is completed the **Product removal** dialog window is displayed. To exit the installation program click the **Finish** button.



Removing of the *Analytics Pack* is completed.

4 Configuring the Analytics Pack subsystem

4.1 Procedure of configuring the Analytics Pack subsystem

The *Analytics Pack* subsystem is configured through the following steps:

1. Installing of *Intellect* software package, *Intellect Detector Pack* software package, *Analytics Pack* subsystem and *Intellect Web Report System* in the required combination.
2. Configuring the *RabbitMQ*.
3. Configuring the required detections (see the [Intellect Detector Pack. User Guide](#) document).

4.2 Installing required program modules to create Visitors behavior analysis reports

4.2.1 Local configuration

In case of local configuration detections are worked and reports are created on the one computer. It is required to install the *Intellect* software package, *Intellect Detector Pack* software package, *Analytics Pack* subsystem and *Intellect Web Report System* to create the *Visitors behavior analysis* reports. Additional configuring of the *RabbitMQ* is not required.

When all required program modules are installed configure the **Detections of "cold/hot" zones of a store** and create required **Visitors behavior analysis** reports (detail description of detection configuration see in the [Intellect Detector Pack. User Guide](#) document and reports description is presented in the [Intellect Web Report System. User Guide](#) document).

4.2.2 Remote generation of statistics on the main server

If it is required to create the *Visitors behavior analysis* reports on the basis of data received from detections of "cold/hot" zones of a store in different stores, do the following:

1. Install the following program modules on each store: the *Intellect* software package, *Intellect Detector Pack* software package, *Analytics Pack* subsystem, *Intellect Web Report System* (if general distributed configuration is planned).
2. Install the following program modules on the server of statistics generation: the *Intellect* software package, *Analytics Pack* subsystem, *Intellect Web Report System*, *Intellect Detector Pack* software package (if general distributed configuration is planned).

Note.

Using of general distributed configuration is not necessary for remote generation of statistics on the main server.

3. Configure the *RabbitMQ* locally in each store (configuring of the *RabbitMQ* is presented in the [Configuring the RabbitMQ user](#) section).
4. Configure the *RabbitMQ* locally on the server of statistics generation (configuring of the *RabbitMQ* is presented in the [Configuring the RabbitMQ application](#) section).
5. Configure detections of «cold/hot» zones of a store in each store (detail configuring of detections is presented in the [Intellect Detector Pack. User Guide](#) document).
6. Configure the visitor behavior analysis reports on the basis of data received from detections in different stores (procedure of reports creating is presented in the [Intellect Web Report System. User Guide](#) document).

4.2.3 Multilevel generation of statistics

In case of data of detections of «cold/hot» zones of a store from each store are received in the place of first level statistics generation and then processed data are received in the main server of statistics generation, do the following:

1. Install the following program modules on each store: the *Intellect* software package, *Intellect Detector Pack* software package, *Analytics Pack* subsystem, *Intellect Web Report System* (if general distributed configuration is planned).
2. Install the following program modules on the server of first level statistics generation: the *Intellect* software package, *Analytics Pack* subsystem, *Intellect Web Report System*, *Intellect Detector Pack* software package (if general distributed configuration is planned).

3. Install the following program modules on the server of second level statistics generation which receives data from the server of first level statistics generation: the *Intellect* software package, *Analytics Pack* subsystem, *Intellect Web report System*, *Intellect Detector Pack* software package.

Note.

Using of general distributed configuration is not necessary for multilevel generation of statistics.

4. Configure the *RabbitMQ* locally on the server of statistics generation of first and second levels (configuring the *RabbitMQ* is presented in the [Configuring the RabbitMQ user](#) section).
5. Configure the *RabbitMQ* locally in each store (configuring of the *RabbitMQ* is presented in the [Configuring the RabbitMQ application](#) section).
6. Configure detections of «cold/hot» zones of a store in each store (detail configuring of detections is presented in the [Intellect Detector Pack. User Guide](#) document).
7. Configure the visitor behavior analysis reports on the basis of data received from detections in different stores (procedure of reports creating is presented in the [Intellect Web Report System. User Guide](#) document).

4.3 Configuring the RabbitMQ application

Configuring the **RabbitMQ** application is performed through the web-interface. In the connection line enter the <http://localhost:15672>.

As a result the **RabbitMQ** authorization page is displayed.

To authorize enter the username and password. In the **Username:** and **Password:** fields enter the guest value (1) and click the **Login** button (2).

The image shows the RabbitMQ web interface for user authentication. At the top, the RabbitMQ logo is displayed. Below the logo, there are two input fields: 'Username:' containing the text 'guest' and 'Password:' containing five dots. A 'Login' button is positioned below the password field. A large number '1' is placed to the right of the input fields, and a large number '2' is placed to the right of the 'Login' button.

As a result one goes on the **RabbitMQ** document page.

Configuring the **RabbitMQ** application is performed the following way:

1. Go to the **Admin** tab in the opened window (1).

The screenshot shows the RabbitMQ Admin interface. At the top right, the user is identified as 'guest' with a 'Log out' button. Below this, the cluster information is displayed: 'Cluster: rabbit@WS4 (change)' and 'RabbitMQ 3.3.4, Erlang R16B01'. The main navigation bar includes 'Overview', 'Connections', 'Channels', 'Exchanges', 'Queues', and 'Admin' (highlighted with a red circle and the number 1). The page title is 'Federation Upstreams'. On the right sidebar, there are links for 'Users', 'Virtual Hosts', 'Policies', 'Federation Status', and 'Federation Upstreams' (highlighted with a red circle and the number 2). The main content area shows a dropdown menu for 'Upstreams' with the text '... no upstreams ...'. Below this, there is a link 'Add a new upstream' (highlighted with a red circle and the number 3) and a link 'URI examples'. At the bottom left, there are options for 'HTTP API' and 'Command Line'. At the bottom right, there is an 'Update' dropdown menu set to 'every 5 seconds' and a timestamp 'Last update: 2014-09-01 10:44:45'.

2. Select the **Federation Upstreams** item (2).
3. Expand the **Add a new upstream** list (3).

4. Enter the **store-upstream** value in the **Name:** field (1).

RabbitMQ™

Overview Connections Channels Exchanges Queues Admin

Federation Upstreams

▼ Upstreams

... no upstreams ...

▼ Add a new upstream

Name: 1

URI: (?) 2

Expires: (?) ms 3

Message TTL: (?) ms

Max hops: (?)

Prefetch count: (?)

Reconnect delay: (?) s 4

Acknowledgement Mode: (?)

Trust User-ID: (?)

5

► URI examples

HTTP API | Command Line |

5. Enter the **amqp://<IP-address of main server>** value in the **URI:** field (2).
6. Enter the **36000000** value in the **Expires:** field (3).
7. Enter the **5** value in the **Reconnect delay:** field (4).
8. Click the **Add upstream** button (5).

9. As a result the new upstream will be added.

The screenshot shows the RabbitMQ Admin interface for Federation Upstreams. At the top, there are navigation tabs: Overview, Connections, Channels, Exchanges, Queues, and Admin (highlighted). The main heading is "Federation Upstreams". Below it, a table lists existing upstreams:

Name	URI	Expiry	Message TTL	Max Hops	Prefetch Count	Reconnect Delay	Ack mode	Trust User-ID
store-upstream	amqp://192.168.0.4	360000ms				5s	on-confirm	o

Below the table is a form to "Add a new upstream" with the following fields:

- Name:
- URI: (?)
- Expires: (?) ms
- Message TTL: (?) ms
- Max hops: (?)
- Prefetch count: (?)
- Reconnect delay: (?) s
- Acknowledgement Mode: (?)
- Trust User-ID: (?)

An "Add upstream" button is located below the form. At the bottom, there is a link for "URI examples".

10. Select the **Policies** menu item (1).
11. Expand the **Add / update a policy** list (2).

The screenshot shows the RabbitMQ Admin interface for Policies. At the top right, user information is displayed: "User: guest", "Cluster: rabbit@WS4 (change)", and "RabbitMQ 3.3.4, Erlang R16B01". A "Log out" button is also present. The navigation tabs are: Overview, Connections, Channels, Exchanges, Queues, and Admin (highlighted). The main heading is "Policies".

On the right side, there is a sidebar menu with the following items:

- Users
- Virtual Hosts
- Policies** (highlighted with a red circle and a '1' next to it)
- Federation Status
- Federation Upstreams

Below the sidebar, the main content area shows "All policies" with a filter input and a "Regex" checkbox. It indicates "0 items (show at most 100)". Below this, there is a link for "Add / update a policy" (highlighted with a red circle and a '2' next to it). At the bottom right, there is an "Update" dropdown menu set to "every 5 seconds" and a "Last update: 2014-09-01 13:55:00" timestamp.

12. Enter the **federate-me** name in the **Name:** field (1).

RabbitMQ

Overview | Connections | Channels | Exchanges | Queues | **Admin**

Policies

▼ All policies

Filter: Regex (?)

... no policies ...

▼ Add / update a policy

Name: 1

Pattern: 2

Apply to:

Definition: (?) String 3

Priority:

4

[HTTP API](#) | [Command Line](#)

13. Enter the **^itv\.** value in the **Pattern:** field (2).
14. Enter the **federation-upstream-set=all** value in the **Definition:** field, type is **String** (3).
15. Click the **Add policy** button (4).

16. As a result the new policy will be added.



RabbitMQ

Overview Connections Channels Exchanges Queues **Admin**

Policies

▼ All policies

Filter: Regex (?)

Name	Pattern	Apply to	Definition	Priority
federate-me	^itv\.	all	federation-upstream-set: all	0

▼ Add / update a policy

Name: *

Pattern: *

Apply to: Exchanges and queues ▼

Definition: (?) = String ▼ *

Priority:

Add policy

[HTTP API](#) | [Command Line](#)

Configuring the *RabbitMQ* is completed.

4.4 Configuring the RabbitMQ user

The **gust** user authorization is used only for working with the <http://localhost:15672> address from **RabbitMQ 3.3.3** version. Create users for authorization on shop servers from which the data stream is received.

Configuring the **RabbitMQ** application is performed the following way:

1. Go to the **Admin** tab in the opened window (**1**).
2. Select the **Users** item (**2**).

- Expand the **Add a user** list (3).

RabbitMQ

User: guest
Cluster: rabbit@WS4 ([change](#))
RabbitMQ 3.3.4, Erlang R16B01

Log out

Overview Connections Channels Exchanges Queues **Admin** 1

Users

▼ All users

Filter: Regex (?) 1 item (show at most)

Name	Tags	Can access virtual hosts	Has password
guest	administrator	/	•

(?)

► Add a user 3

HTTP API | Command Line

Update: every 5 seconds ▼

Last update: 2014-09-10 10:37:47

- Enter the new login for authorization in the **Username:** field (1).
- Enter the password in the **Password:** field (2).
- Enter the password again to confirm it in the (3) field (3).
- Enter the **administrator** value in the **Tags:** field (4).
- Click the **Add user** button (5).

RabbitMQ

Overview Connections Channels Exchanges Queues **Admin**

Users

▼ All users

Filter: Regex (?)

Name	Tags	Can access virtual hosts	Has password
guest	administrator	/	•

(?)

▼ Add a user

Username: *

Password: *

* (confirm)

Tags: (?)

[Admin] [Monitoring] [Policymaker] [Management] [None]

Add user 5

HTTP API | Command Line

9. As a result the new user will be added.

RabbitMQ

Overview Connections Channels Exchanges Queues **Admin**

Users

▼ All users

Filter: Regex (?)

Name	Tags	Can access virtual hosts	Has password
User1	administrator	No access	•
guest	administrator	/	•

(?)

▼ Add a user

Username: *

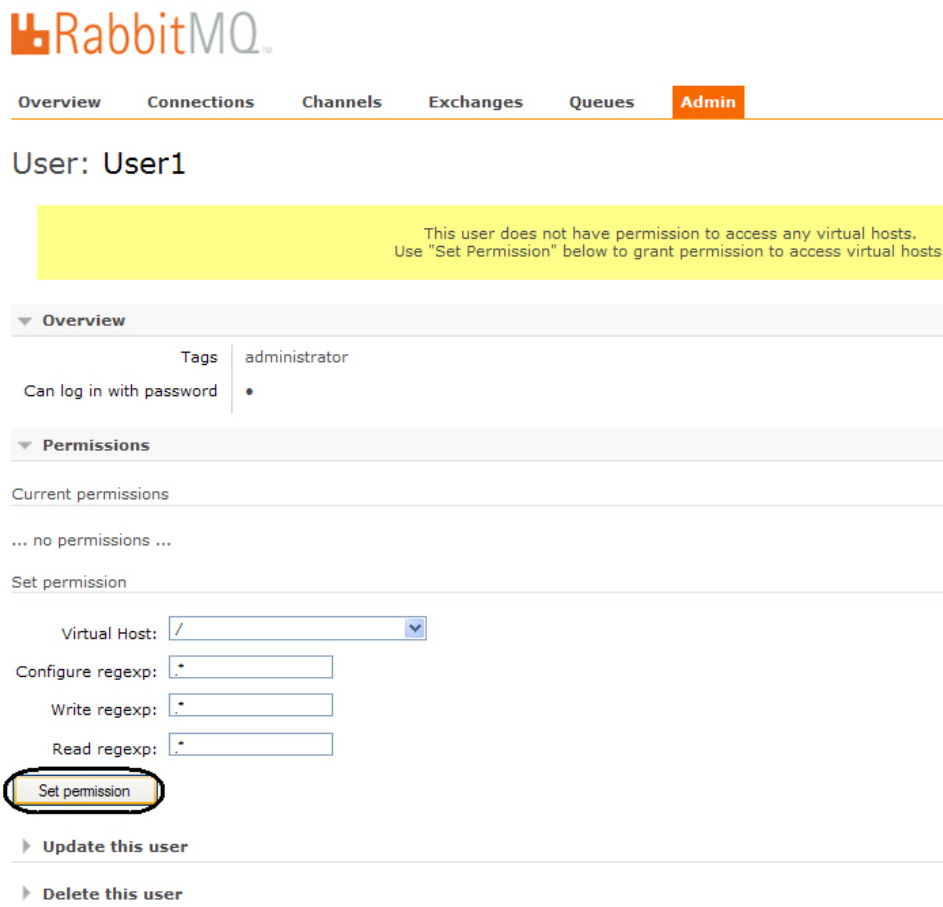
Password: * * (confirm)

Tags: (?)
[Admin] [Monitoring] [Policymaker] [Management] [None]

[HTTP API](#) | [Command Line](#)

10. To configure user click the corresponding name in the table.

11. In the opened window click the **Set permission** button.



The screenshot shows the RabbitMQ Admin web interface. At the top, the RabbitMQ logo is visible, followed by a navigation menu with tabs for Overview, Connections, Channels, Exchanges, Queues, and Admin (which is highlighted). Below the navigation, the page title is 'User: User1'. A yellow warning box states: 'This user does not have permission to access any virtual hosts. Use "Set Permission" below to grant permission to access virtual hosts.' Below the warning, there are two sections: 'Overview' and 'Permissions'. The 'Overview' section shows 'Tags' as 'administrator' and 'Can log in with password' as a checked checkbox. The 'Permissions' section shows 'Current permissions' as '... no permissions ...'. Under 'Set permission', there are three input fields: 'Virtual Host' (a dropdown menu with '/' selected), 'Configure regexp' (containing '*'), 'Write regexp' (containing '*'), and 'Read regexp' (containing '*'). A 'Set permission' button is highlighted with a red circle. At the bottom of the 'Permissions' section, there are two links: 'Update this user' and 'Delete this user'.

12. As a result access permissions will be granted to user that allows connecting of shops to the server of statistics generation. Configuring of *RabbitMQ* user is completed.