

analytics Pack

User Guide

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# 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.

# 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.

# Installing, restoring and repairing of Analytics Pack subsystem

### 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 *I ntellect* 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.
  - Canguages Broduct.msi Setup.exe
- 2. The **Selecting components for installation** dialog window is displayed.

Instal	ation wizard		
Select Select	<b>cting components for in</b> t the components you want to	istallation install and click Install.	analytic g
Components Prerequisites		Mode	Install?
Œ	Prerequisites		
	Base product		
	AnalyticsPack	Uninstalled	
<		Ш	
<b>€</b> F	able full logging (increases tim	e of product installation) 2	
		3 🗔	stal Cancel

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

(i) Note. All offered components are recommended.

- 4. To log all installation events, set the Enable full logging (increases time of product installation) checkbox (2)

Click **Install** button (**3**). The selected components are automatically installed.



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

#### Next button.



Ready to Install Setup wizard is now ready to begin installation of AnalyticsPack v.3.1.0.306 on your computer.	analytic S
Setup wizard is ready to install AnalyticsPack v.3.1.0.306 on your PC start. If you want to review or change any installation parameters, o Cancel to exit the Setup wizard.	Click Install to lick Back. Click
Back	al Cancel

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

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

🛃 Installation of AnalyticsPack v. 3. 1. 0. 306	×
Installing AnalyticsPack v.3.1.0.306	S
Please wait till Setup wizard installs AnalyticsPack v.3.1.0.306. Installation period depends on the operating system configuration and software that is already installed.	
Status: Creating database	
	_
Cancel	

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.

😼 Installation of AnalyticsPack v. 3. 1. 0. 306	
Installation Complete Installation of AnalyticsPack v.3.1.0.306 is completed.	analytic S
Installation of AnalyticsPack v.3.1.0.306 on your computer is completed. If you installing AnalyticsPack v.3.1.0.306 from CD, please, remove the installation me Finish to exit.	⊧were ;dia. Click
	Finish

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.

	analytic C
its is complete. Installed	analytic
Mode	
Installed	
Installed	
Installed	
Installed	
Installed	
	Finish
	Its is complete. Installed Mode Installed Installed Installed Installed Installed

13. Click the **Finish** button.

The Analytics Pack subsystem installation is finished.

#### **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.

Installation wizard	
Please wait till the system finishes all the necessary operations.	analytic s

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

Installation wizard		
Installation complete Installation of the selected componen components are:	nts is complete. Installed	analytic s
Components Prerequisites	Mode	
Postgres 5QL .Net 4.0 Update	Installed Installed	
Erlang runtime RabbitMQ	Installed Installed	
Base product     AnalyticsPack	Installed	
		Finish

Change of Analytics Pack subsystem is completed.

## **Removing of the Analytics Pack subsystem**

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 Packs* ubsystem settings.
- 4. Click the **Next** button.

Select action	$\mathbf{X}$
Select action	analytic g
Select the type of operation and click Next.	
◯ Edit / Restore	
Remove           Save program settings and configuration files           (recommended)	
Next	Cancel
Process of removing of Analytics Pack subsystem will be started.	
Installation wizard	
Please wait till the system finishes all the necessary	analytic s

operations.

6. 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.

## **Configuring the Analytics Pack subsystem**

5.

### 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 *Int ellect Web Report System* in the required combination.
- 2. Configuring the *RabbitMQ*.
- 3. Configuring the required detections (see the Intellect Detector Pack. User Guide document).

# Installing required program modules to create Visitors behavior analysis reports

#### 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)

#### 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).
- Install the following program modules on the server of statistics generation: the *Intellect* software package, *Analytic* s 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 on the server of statistics generation (configuring of the *RabbitMQ* is presented in the Configuring the RabbitMQ user section).
- 4. Configure the *RabbitMQ* locally in each store (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).

#### **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).

#### Configuring the RabbitMQ application

Configuring the **RabbitMQ** application is performed through the web-interface. In the connection line enter the *http://local host: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).

	R	abbitMQ	
(	Username:	guest	
	Password:	••••	.ر
		Login 2	

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).

Rabb	oitMQ					Us Cluster: rabbit@WS4 RabbitMQ 3.3.4, <u>Erlan</u> g	er: guest ( <u>change</u> ) g R16B01	Log out
Overview	Connections	Channels	Exchanges	Queues	Admin 1			
Federatio	on Upstre	ams				Users Virtua	l Hosts	
▼ Upstreams						Polici	es	
no upstreams						Feder Feder	ation Statu: ation Upstr	eams
Add a new u	upstream 3							
URI example	es							
HTTP API Comm	and Line					Upd	ate every 5	seconds 🔻
						Last updat	te: 2014-09	-01 10:44:4

- 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).

Rabbit	MQ				
Overview Conn	ections	Channels	Exchanges	Queues	Admin
Federation	Upstre	ams			
▼ Upstreams					
no upstreams					
▼ Add a new upstre	am				
(	Name: st	ore-upstream	1		
(	URI: (?) ar	nqp://192.168.0.4	2		
Expi	res: (?) 36	000000	ms 3		
Message	TTL: (?)		ms		
Max ho	ops: (?)				
Prefetch co	unt: (?)				
Reconnect de	lay: (?) 5		s 4		
Acknowledgement Mo	ode: (?) 0	n confirm	~		
Trust User	-ID: (?) N	0	*		
Add upstream	) 5				
URI examples					
HTTP API Command Li	ine				

- Enter the amqp://<IP-address of main server> value in the URI: field (2).
   Enter the 3600000 value in the Expires: field (3).
   Enter the 5 value in the Reconnect delay: field (4).
   Click the Add upstream button (5).
   As a result the new upstream will be added.

Rabb	oitMQ.							
Overview	Connections Cha	nnels	Exchanges	Queues	Admin			
Federatio	on Upstream	IS						
▼ Upstreams								
Name store-upstream	URI amqp://192.168.0.4	Expiry 360000ms	Message TTL	Max Hops	Prefetch Count	Reconnect Delay	Ack mode on-confirm	Trust User-ID ∘
▼ Add a new u	pstream							/
	Name:		*					
	URI: (?)		*					
	Expires: (?)		ms					
Mess	sage TTL: (?)		ms					
м	lax hops: (?)							
Prefet	ch count: (?)							
Reconne	ect delay: (?)		s					
Acknowledgeme	ent Mode: (?) On confi	rm	*					
Trust	User-ID: (?) No		*					
Add upstream	n							
URI example	es							
Select the <b>Policie</b> Expand the <b>Add /</b>	s menu item (1). update a policy	ı list ( <b>2</b> ).						
<b>H</b> Rabbi	tMQ.					Cluster: rab RabbitMQ 3.3	User: ( bit@WS4 ( <u>cha</u> 3.4, Erlang R1	Log out 6801
Overview Co	onnections Channel	s Excha	nges Queu	es Adm	in			
Policies							Users	
							Virtual Ho	osts
Filter:	Regex (?)				0 items (sh	ow at most 100)	Federatio Federatio	n Status n Upstreams

no policies	
Add / update a policy 2	
HTTP API Command Line	Update every 5 seconds 🗸
	Last update: 2014-09-01 13:55:00

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

10. 11.

<b>H</b> Rab	bitMQ				
Overview	Connections	Channels	Exchanges	Queues	Admin
Policies					
<ul> <li>All policies</li> </ul>	;				
Filter:		Regex (?)			
Add / upda	ate a policy federate-me				
Pattern:	^itv\.	) 2			
Apply to:	Exchanges and q	ueues 🚩			-
Definition: (?)	federation-upstrea	am-se = all		String ¥	<u> </u>
Priority:				Sung 💌	
Add policy	)₄				
HTTP API Comr	mand Line				

- Enter the **^itv\.** value in the **Pattern:** field (2).
   Enter the **federation-upstream-set=all** value in the **Definition:** field, type is **String (3)**.
   Click the **Add policy** button (4).
   As a result the new policy will be added.

<b>H</b> Rab	bit	VIQ.,,,							
Overview	Conne	ctions	Channels E	xchanges	Queues	Admin			
Policies									
All policies	s								
Filter:			Regex (?)						
Name	Pattern	Apply to	Definition	ı	Priority	$\overline{}$			
federate-me	^itv∖.	all	federation-upstrea	am-set: all	0	J			
▼ Add / upd	ate a pol	icy				_			
Name:			*						
Pattern:			*						
Apply to:	Exchan	ges and q	ueues 💌						
Definition: (?)			=		String 💌	*			
Priority:									
Add policy									
HTTP API Com	mand Lin	e							

Configuring the *RabbitMQ* is completed.

## Configuring the RabbitMQ user

The **gust** user authorization is used only for working with the *http://localhost:15672* address from **RabbitMQ 3.3.3** versio n. It is required to create users for authorization on servers on which the data stream is receiving.

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

Dvervi	ew Conn	ections Channels	Exchanges	Queues Ad	min 1		
Jser	S						Users Virtual Hosts
ilter:	Jsers	Regex (?)			1 item (show at	most <u>100</u> )	Federation Status Federation Upstreams
lame	Tags	Can access virtual hosts	Has password				
uest	administrator	1	•				
?) • Add	a user 3	8					

- 4. Enter the new login for authorization in the **Username:** field (1).
- 5. Enter the password in the **Password:** field (2).
- 6. Enter the password again to confirm it in the (3) field (3).

- 7. Enter the administrator value in the Tags: field (4).
   8. Click the Add user button (5).

<b>B</b> P	Rabbit	MQ				
Overv	iew Conr	ections	Channels	Exchang	es Que	eues Admin
Usei	rs					
⇒ All	users					
Filter:		Re	gex (?)			
Name	Tags	Can access	virtual hosts	Has password	]	
guest	administrator		1	•		
(?) • Add	l a user					
Passwo	Username: Us rd: 👽 💽	er1	1 2			
	Tags: ad	ministrator	* (co (?) olicymaker] [Manageme			
Add us	ser 5					
HTTP AF	PI Command Li	ne				

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

<b>H</b> R	Rabbit	MQ								
Overv	iew Conn	ections	Channels	Exchanges	Queues	Admin				
User	ſS									
▼ All	▼ All users									
Filter:		Re	gex (?)							
Name	Tags	Can access	virtual hosts H	as password						
User1	administrator	No a	access	•						
guest	guest administrator / •									
(?)										
▼ Add	l a user									
	Username:		*							
Passwo	rd: 💌		*							
	Tags: (?) (Admini (Monitoring) [Policymaker] (Management) [None]									
Add us	ser									
HTTP AF	PI Command Li	ne								

- To configure user click the corresponding name in the table.
   In the opened window click the **Set permission** button.

<b>H</b> Rab	bitMQ				
Overview	Connections	Channels	Exchanges	Queues	Admin
User: U	ser1				
		U	This user does r Ise "Set Permissior	not have permis " below to gran	ssion to access any virtual hosts. nt permission to access virtual hosts.
• Overview	r				
Can log in wi	Tags adm th password •	inistrator			
• Permissio	ons				
Current permi	ssions				
no permissi Set permissior	ons				
Virtual H	Host: /		~		
Configure reg	exp:				
Write reg	exp:				
Read reg	exp: .*				
Set permissio					
Vpdate ti	nis user				
Delete th	is 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.