
Bitrix Site Manager 9.x

Installation Guide

Introduction

This manual is for reading by Bitrix Site Manager users. The document covers the following most important key points:

- § installation of the evaluation and commercial versions;
- § installation using Bitrix Environment;
- § registration of your Bitrix Site Manager copy at the Bitrix company web site, downloading source codes – operations that are essential to obtain the fully-functional open source system.

The manual also describes how to transfer a site from a local machine to a remote server; check the remote system for minimum requirements and fine-tune a remote system for better performance.

The readers of this manual are recommended to take a free online course **Installation and Configuration (BX-CONF001)** at

http://www.bitrixsoft.com/support/training/course/index.php?COURSE_ID=12. Web engineers who taken web courses and successfully passed final tests can obtain a user, administrator or developer certificates.

- § Use the Windows installer to evaluate the system at your local computer (see [Using Windows Installer](#)).
- § Use Bitrix Web Environment to install third-party software required by Bitrix Site Manager (Apache, PHP, database, Zend Optimizer): see [Installing Bitrix Web Environment](#).
- § If you already have all the required third-party software installed, see [Installing Bitrix Site Manager](#).
- § To install the system on a remote server, use the BitrixInstall script: see [Installation Using BitrixInstall](#). As an alternative, you can install using a **.tar.gz** or **.zip** archive ([Installing Bitrix Site Manager](#)).

Should you have any questions installing the system, you can always contact the [technical support service](#).

Chapter 1.

Using the Windows Installer

The Windows installers are provided to install the encoded evaluation version (***_encode_php5.exe) as well as the commercial version with full source code (***_source.exe), here *** is the name of the product edition.

Your system must satisfy the following minimum requirements for successful installation and running:

- § Windows 98/ME/NT/2000/XP/Vista/7/Server 2003/2008;
- § 80 to 140 MB of free disk space, depending on the edition.
- § Internet connection.

Setup Operations

- Download the required installer file.

The trial versions are available at <http://www.bitrixsoft.com/download/cms/index.php#tab-trial-link>. To download the commercial version, go to <http://www.bitrixsoft.com/download/sources.php>.

- Run the file you have downloaded. This will open the initial screen of the installation wizard.

The installation wizard will guide you through the installation steps explaining any action you would have to perform. The installation procedure will:

- § download and install Bitrix Web Environment from the Bitrix web site, if required;
- § install Bitrix Site Manager.

Use the **Next** and **Back** buttons to navigate through the wizard steps. Whenever you want to interrupt the installation procedure, click **Cancel**.

Bitrix Site Manager Installation Wizard

Step 1. The Initial Installation Screen

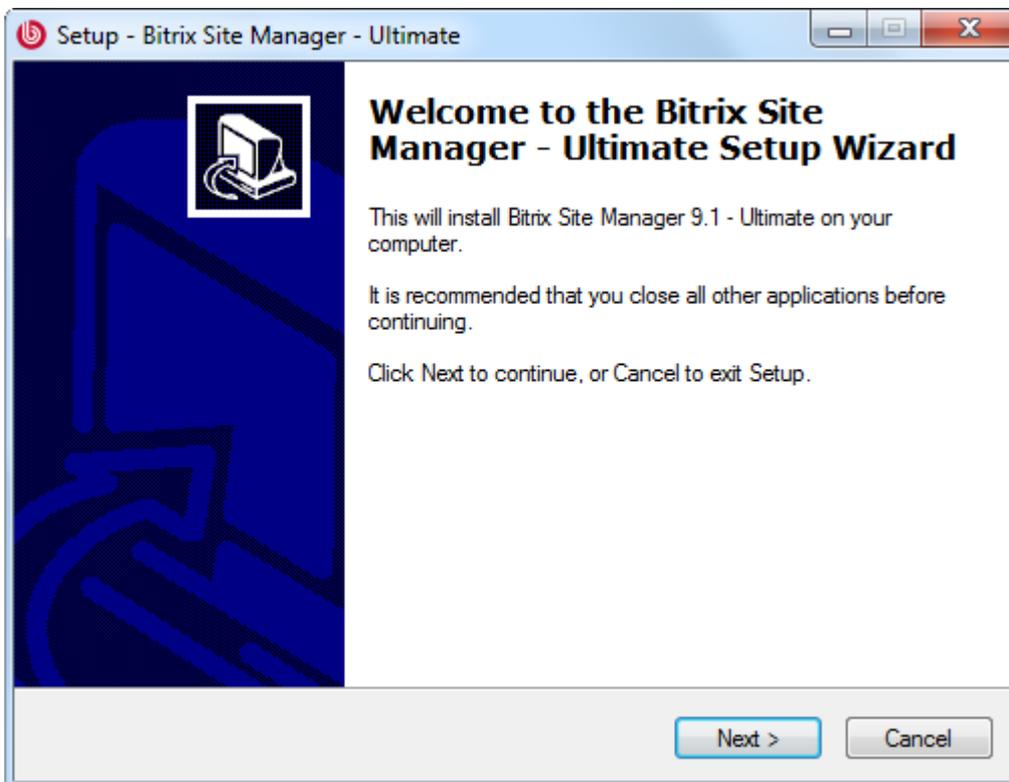


Fig. 1.1 The first step of the installation wizard

The first wizard window informs you that the installation is starting and displays the basic information about the product.

- q Click **Next**. This will open the next step containing the Bitrix Site Manager License Agreement.

Step 2. The License Agreement

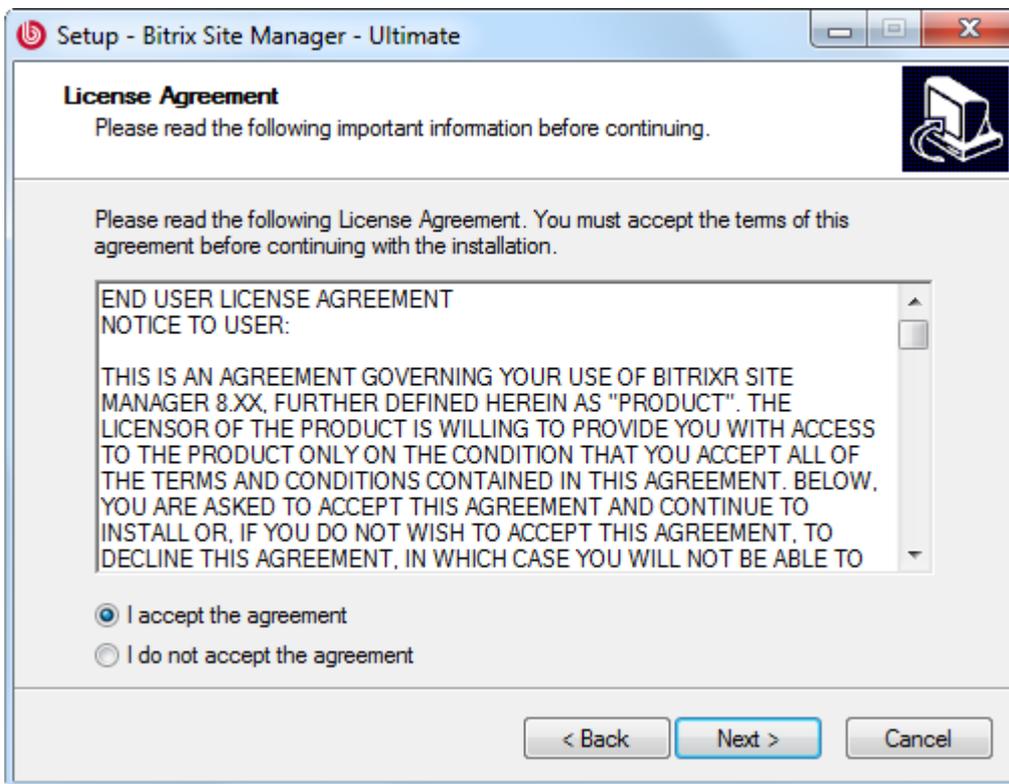


Fig. 1.2 The License Agreement

- q Read the Agreement carefully. If you accept the license terms, check the **I accept the agreement** box. You must accept the License Agreement to continue installation.
- q Click **Next** to open the next window of the Wizard.

Step 3. Bitrix Environment and Encoding

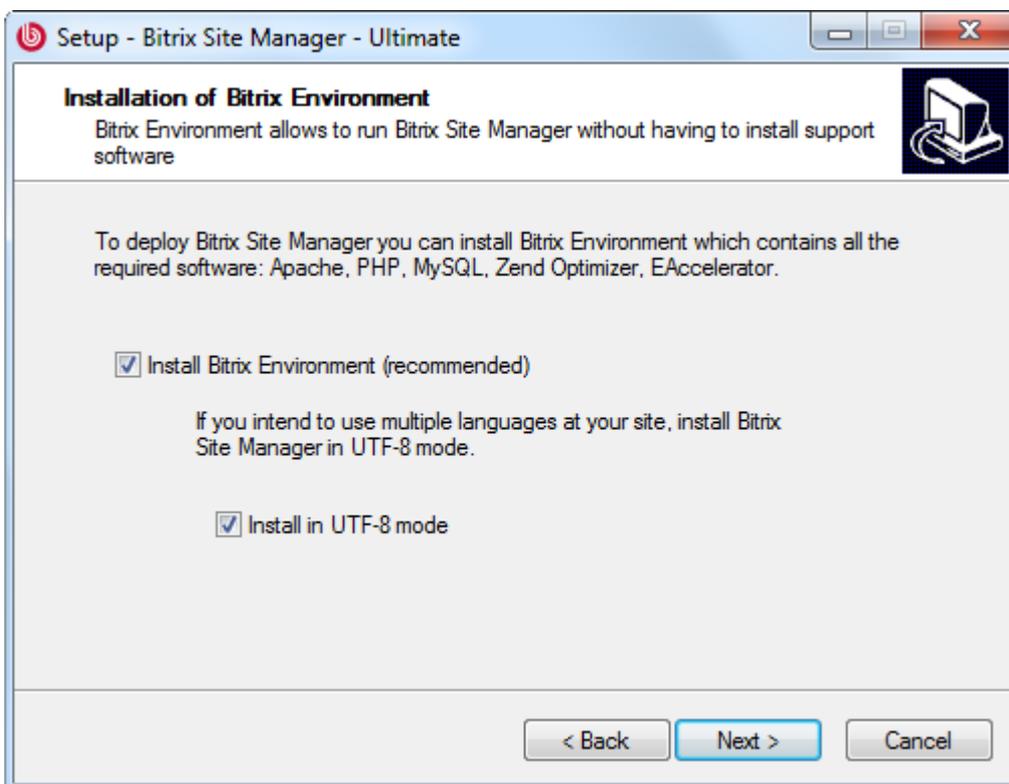


Fig. 1.3 Setting up Bitrix Environment

If you do not have **Bitrix Environment** installed on your machine, do the following.

- q Enable the **Install Bitrix Environment** option.

This will download and run **bitrix_env.exe**, the Bitrix Environment package (see [Installing Bitrix Web Environment](#)) which will install all the required third-party software: **MySQL 5.0.51**, **Apache 2.2.8**, **PHP 5.2.6**, **ZendOptimizer 3.3.0**, **eAccelerator 0.9.5**.

Important! If you refuse to install Bitrix Environment, the wizard will proceed to the destination folder selection step. In this case, you will have to install all the required software manually. However, if, having installed Bitrix Site Manager you find that you cannot install these applications without assistance, simply run the Wizard again.

- q If you plan to use multiple languages on your site, enable UTF-8 encoding.
- q Click **Next** (step 4).

If you have previously installed Bitrix Environment package, uncheck the **Install Bitrix Environment** option. Confirm that you do not want to download and install it:

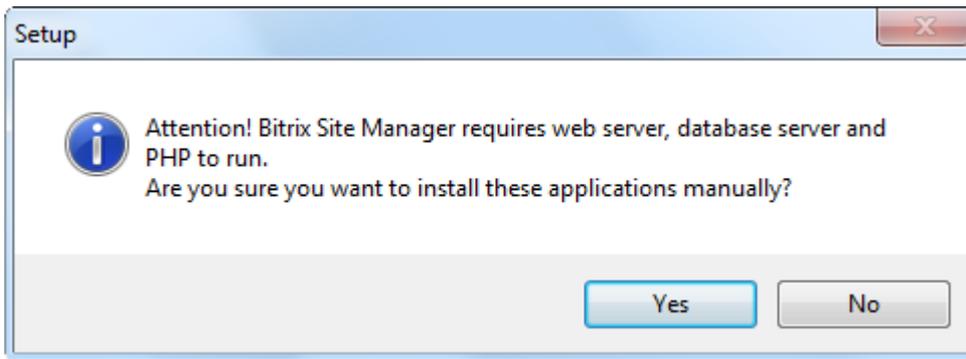


Fig. 1.4 Bitrix Environment installation warning

This will open the destination folder selection window.

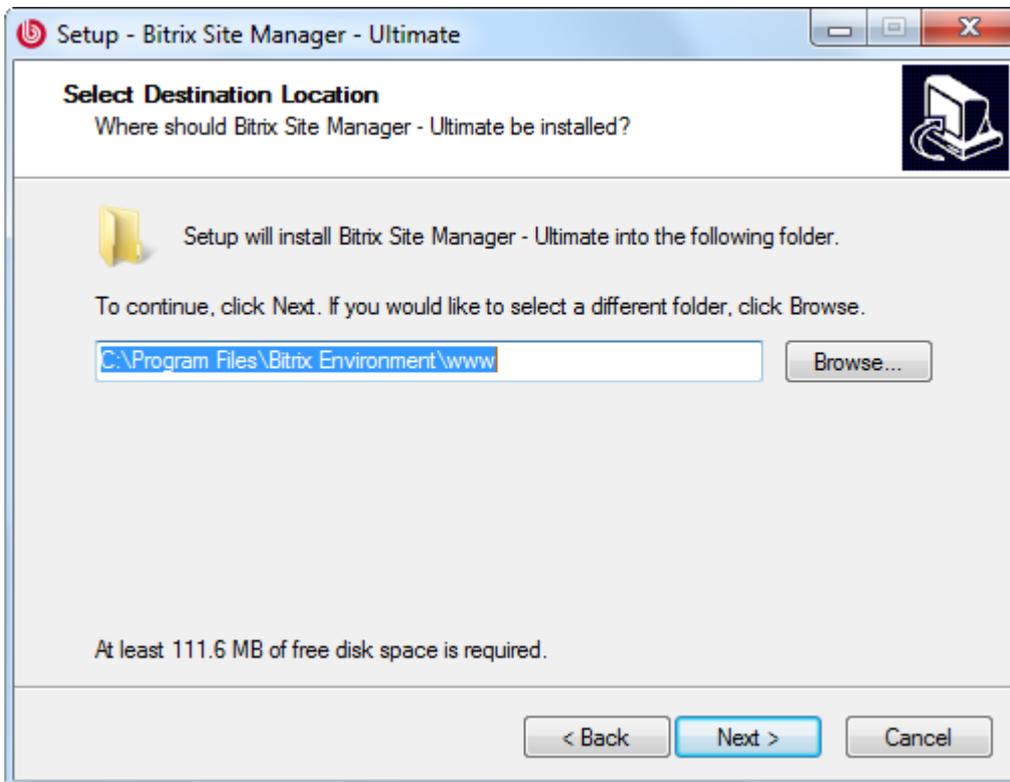


Fig. 1.5 Destination folder selection

- q Specify the folder in which the Bitrix Site Manager files will be unpacked and click **Next**.

The installation confirmation window will appear.

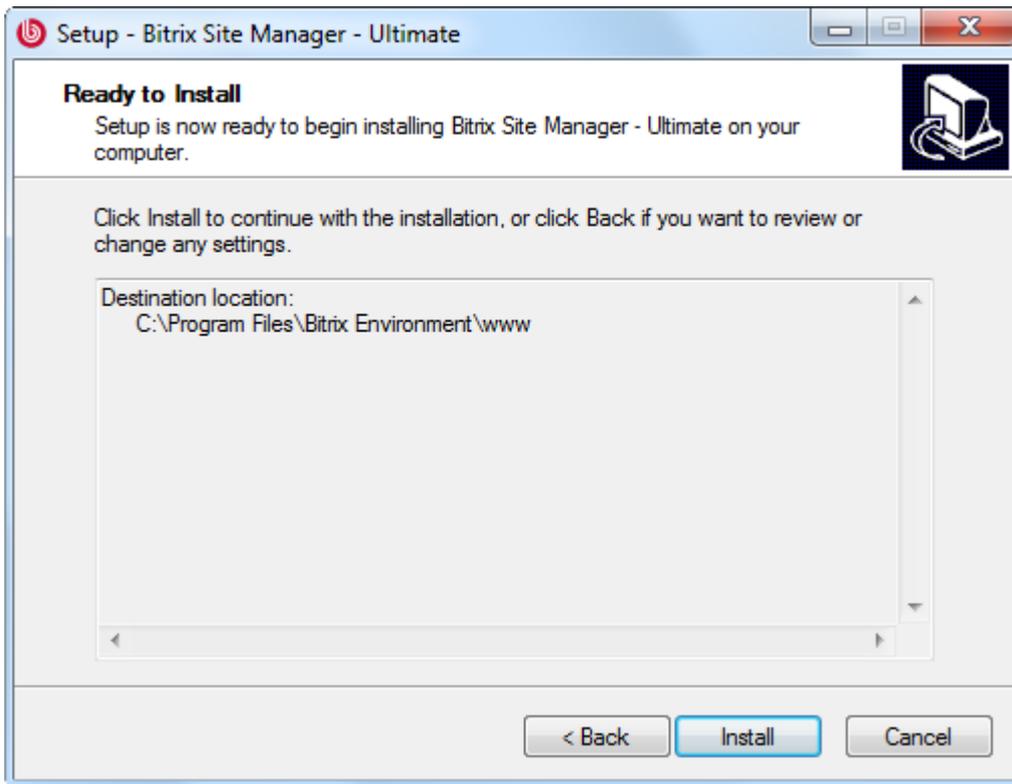


Fig. 1.6 The installation confirmation window

Review all settings. At this step, you still can change them if required by clicking **Back**.

- q Click **Install**. The installation progress window will show (step 5).

Step 4. Ready to Install

This window displays a summary of the installation preferences you have specified in the previous steps. Click **Back** if you need to change settings.

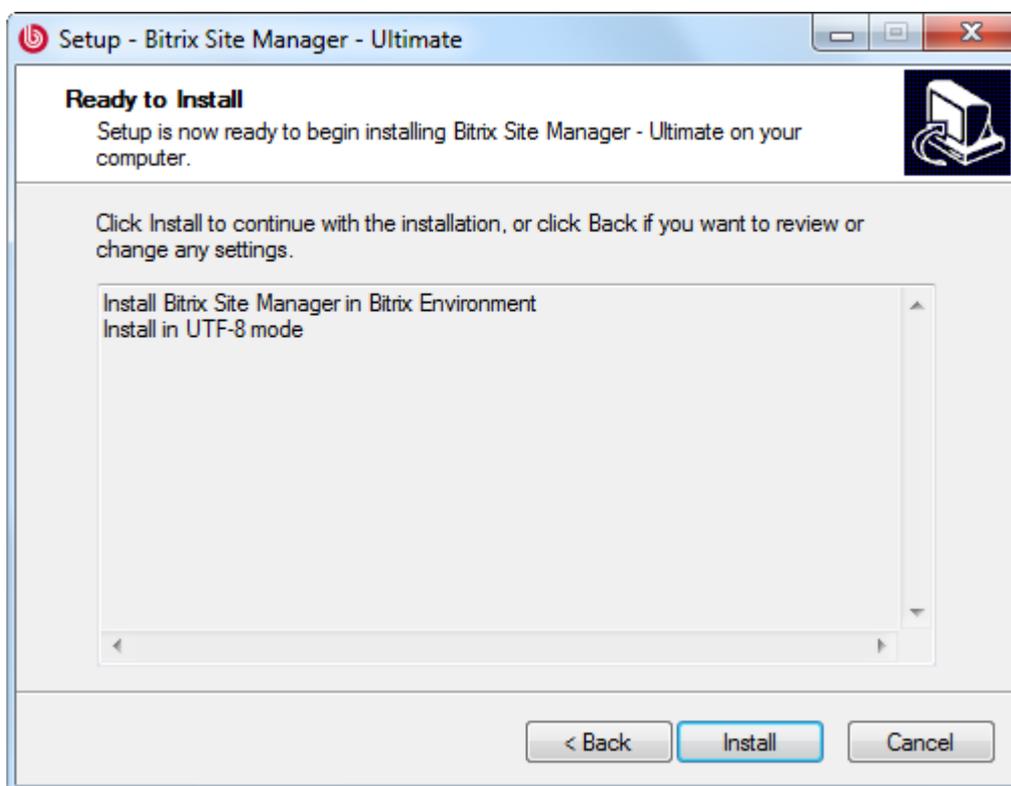


Fig. 1.7 Installation information

q If you accept the proposed settings, click **Install** to start installation.

If you have chosen to download and install Bitrix Environment, the web environment installation wizard will start (see [Installing Bitrix Web Environment](#)). When it completes, the step 5 will follow.

Step 5. Copying Files

The installation of Bitrix Site Manager is now starting.

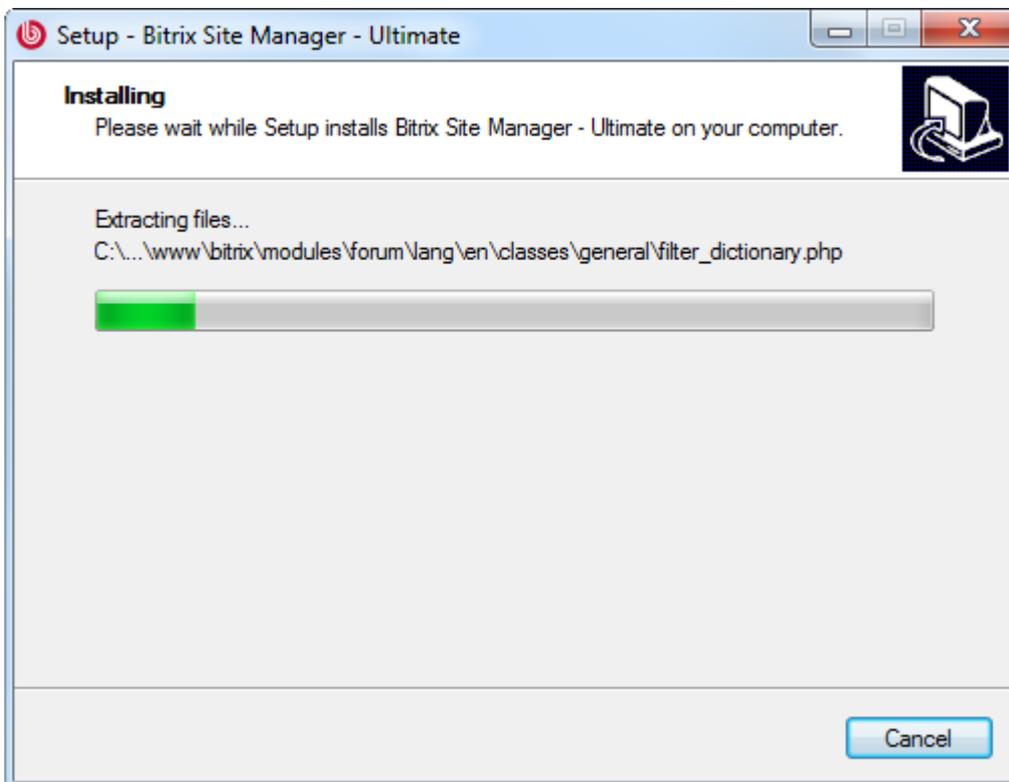


Fig. 1.8 Installing Bitrix Site Manager

When the installation completes, the last window will open notifying that all the files have been copied successfully.

Step 6. Final Step

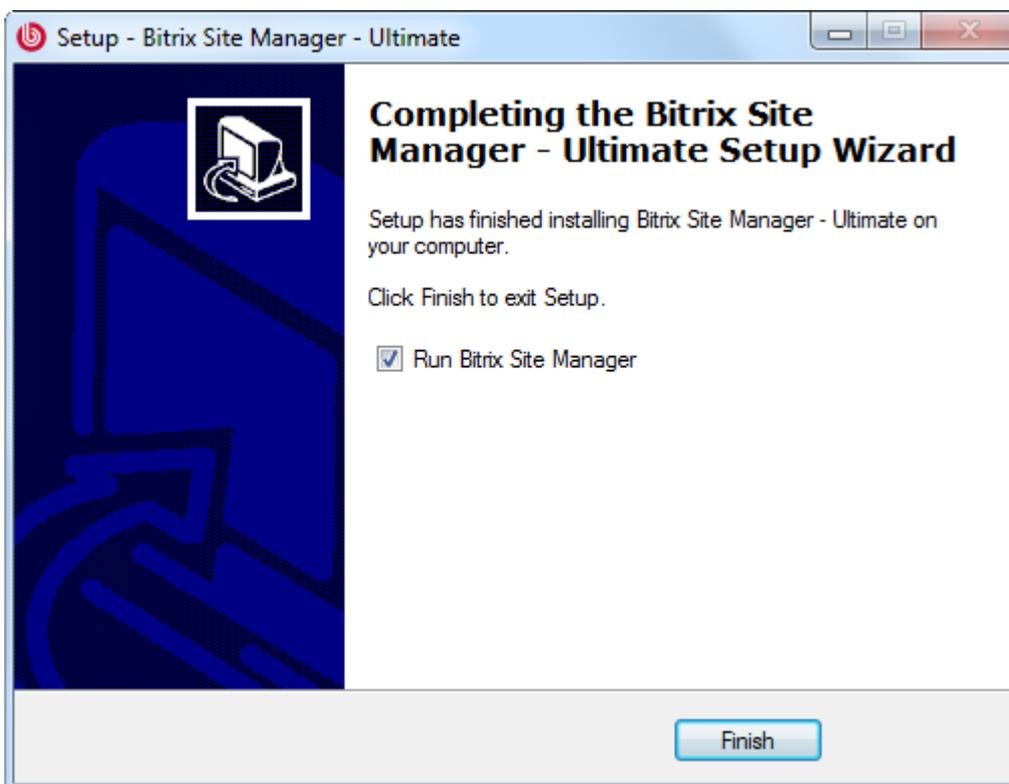


Fig. 1.9 The final step of the installation

This window informs that Bitrix Site Manager files have been successfully copied to your machine.

- q To run Bitrix Site Manager right after closing the installation wizard, enable the **Run Bitrix Site Manager** option.
- q Click **Finish** to quit the wizard.

Running Bitrix Site Manager

First Run

When the installed application is being run for the first time, it opens a web browser window in which the Bitrix Site Manager installation will continue.

If you install the system on an existing web environment, the first step of the Bitrix Site Manager web installer will open (see [Installing Bitrix Site Manager](#)). As soon as it is completed, the [Site Creation Wizard](#) will start.

If you have installed the system and the Bitrix Web Environment simultaneously, the number of steps depends on the installer file you have downloaded:

- § for the evaluation version (*****_encode_php5.exe**), the installation will include two steps. The first step is the same as the [step 6](#), and the second step is the same as the [step 7](#) of the system installation wizard. Having completed these steps, you will proceed to the [Site Creation Wizard](#);
- § for the commercial version (*****_source.exe**), the installation will involve three steps, the two last of which are the same as with the evaluation version, and the first requires that you enter your license key.

Subsequent Runs

You can run Bitrix Site Manager:

- § by activating the shortcut  on the windows desktop (if you have chosen to create it);
- § using the Start menu (*Start -> Programs -> Bitrix Environment ->  Bitrix Environment*);
- § by running **BitrixEnv.exe** located in the system installation folder (e.g. *C:\Program Files\Bitrix Environment*)

Using the Taskbar Icon

After the system has been launched, the Bitrix Web Environment icon becomes visible in the system tray.

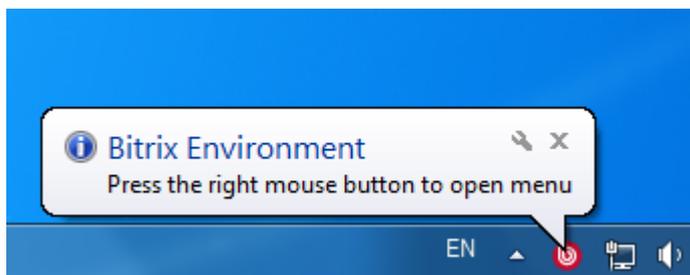


Fig. 1.10 The taskbar icon

When visible, this icon indicates that all the applications required by the system are up and running. You can now start working with Bitrix Site Manager.

q Right-click on the icon to bring up the context menu.



Fig. 1.11 The context menu

The menu includes the following commands:

- § **Open:** opens the public section (i.e. the index page visible to visitors) of the site in your browser;
- § **About:** navigates to the **Bitrix** company site;
- § **Exit:** closes all the applications required by Bitrix Site Manager (web server, database etc.).

Chapter 2.

Installing Bitrix Web Environment

The Bitrix Web Environment package is extremely useful for testing the trial versions of Bitrix Site Manager. The Bitrix Web Environment installation wizard deploys the following applications required by the system:

- § MySQL 5.0.51
- § Apache 2.2.8
- § PHP 5.2.6
- § ZendOptimizer 3.3.0
- § eAccelerator 0.9.5

Preliminary Operations

Do the following to download Bitrix Web Environment.

- q Open <http://www.bitrixsoft.com/download/cms/index.php#tab-bx-environment-link> in your browser (the download page).
- q Click **Download**.
- q Click **Save** in the file download dialog box.
- q Run the downloaded file. A Bitrix Web Environment installation wizard window will open.

The Bitrix Web Environment Installation Wizard

The installation of Bitrix Web Environment is very simple. It will not take more than 5 minutes.

Use the **Next** and **Back** buttons to navigate through the wizard steps. The **Back** button allows you to return to a previous step if you need to change the installation preferences. If you want to abort the installation, click **Cancel**.

Step 1. The Initial Installation Screen

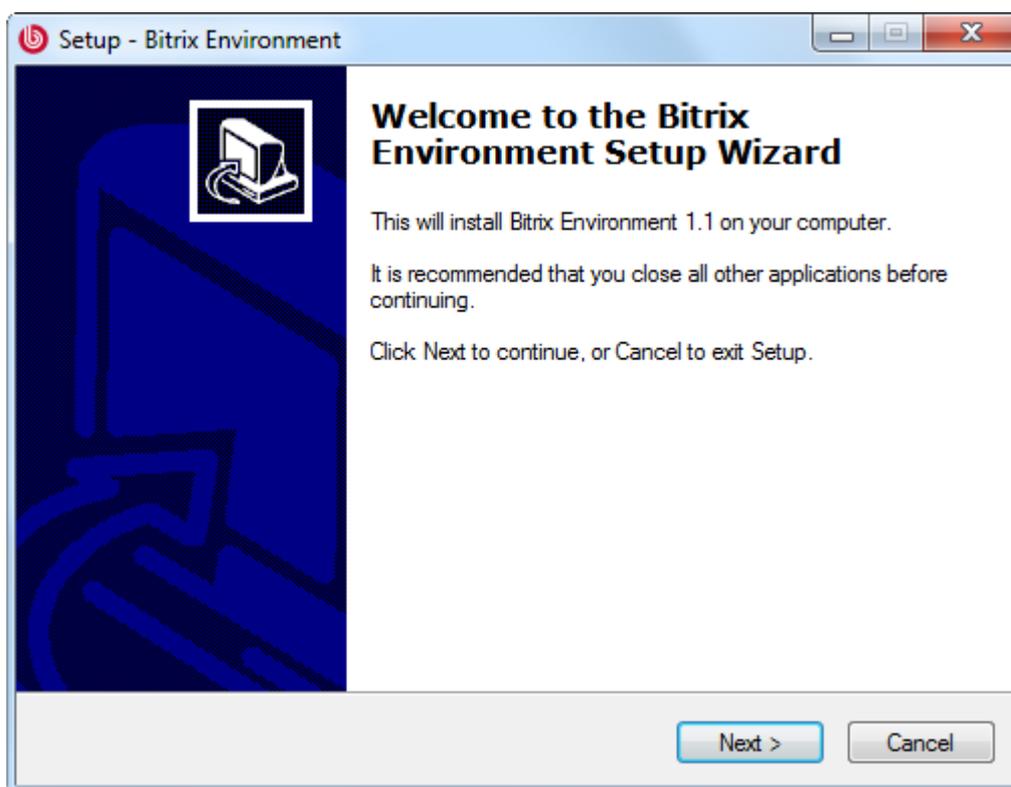


Fig. 2.1 The first step of the Bitrix Web Environment installation wizard

The first wizard window informs you that the installation is starting and displays the basic information about the product.

- q Click **Next**. This will open the next step containing the License Agreement.

Step 2. The License Agreement

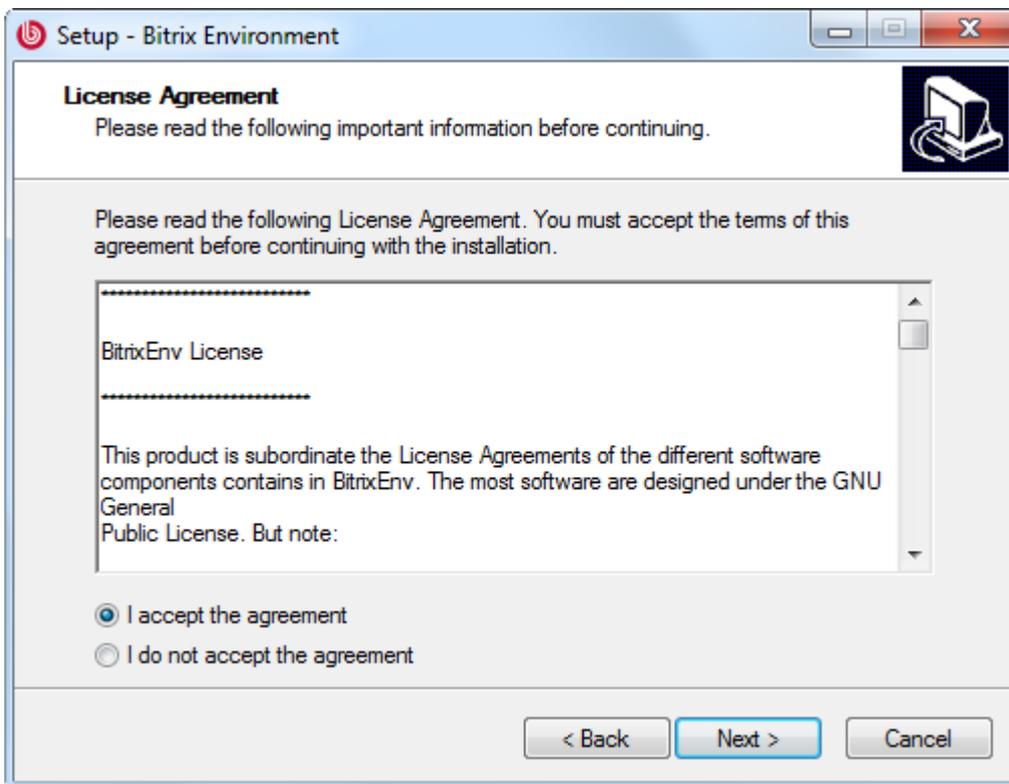


Fig. 2.2 The License Agreement

- q Read the Agreement carefully. If you accept the license terms, check the **I accept the agreement** box. You must accept the License Agreement to continue installation.
- q Click Next to open the next window of the Wizard.

Step 3. Choosing Installation Folder

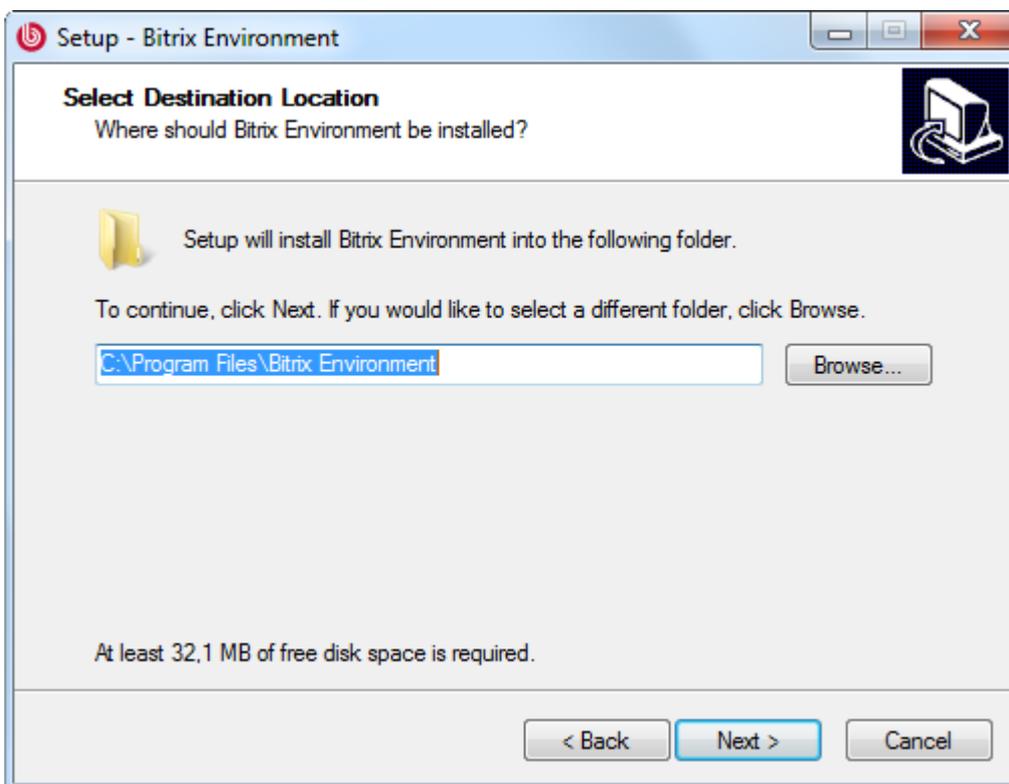


Fig. 2.3 Destination folder selection

- q Specify the folder to which the Bitrix Web Environment will be installed. The default destination directory is **Program Files\Bitrix Environment**. To choose a different folder, click **Browse** and select the folder in the tree, or type the path in the edit box.
- q Click **Next** to open the next screen.

Step 4. Shortcuts

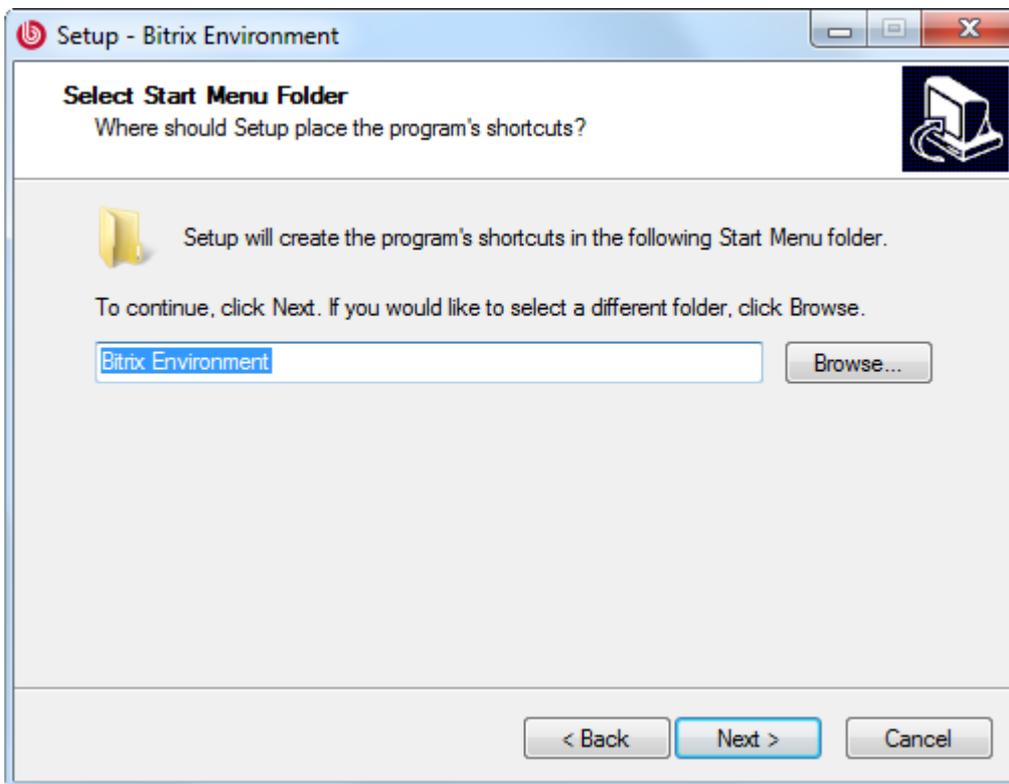


Fig. 2.4 Start menu shortcuts

This window shows the name of a folder containing the application shortcuts that will be created in the **Start** menu. By default, the wizard suggests the folder **Bitrix Environment**. You can specify a different folder name.

q Click **Next** to go to the next step.

Step 5. More actions

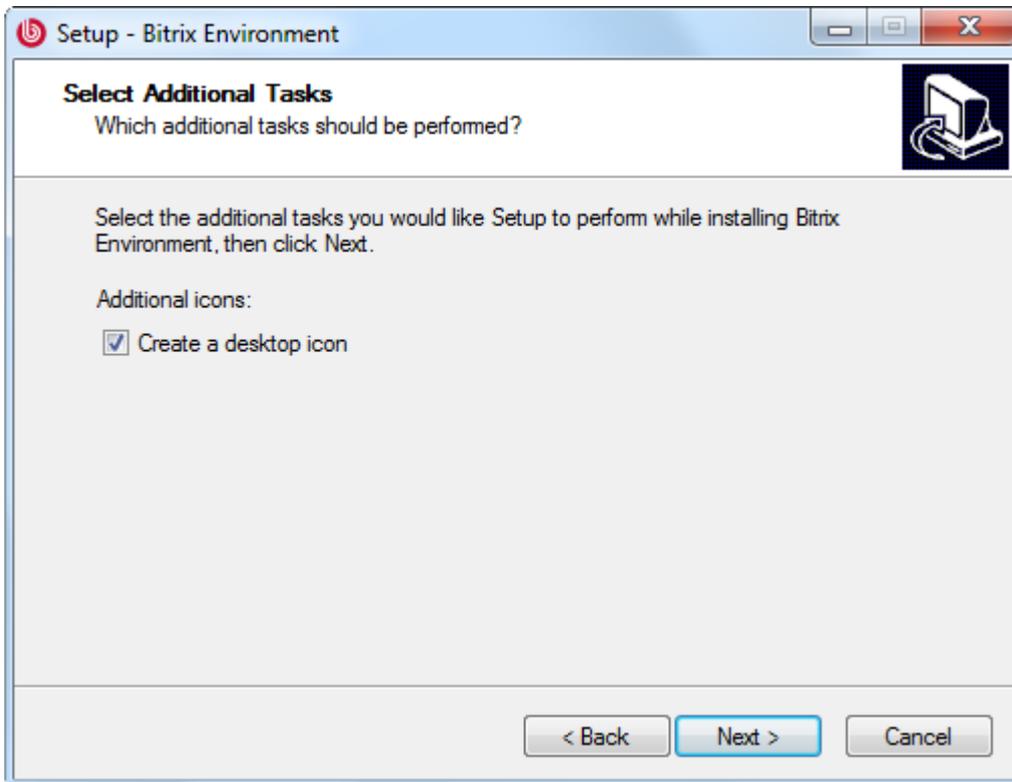


Fig. 2.5 Additional setup tasks

Enable the **Create a desktop icon** option to place a shortcut to Bitrix Web Environment on your desktop.

q Click **Next** to go to the next step.

Step 6. Web Server Parameters

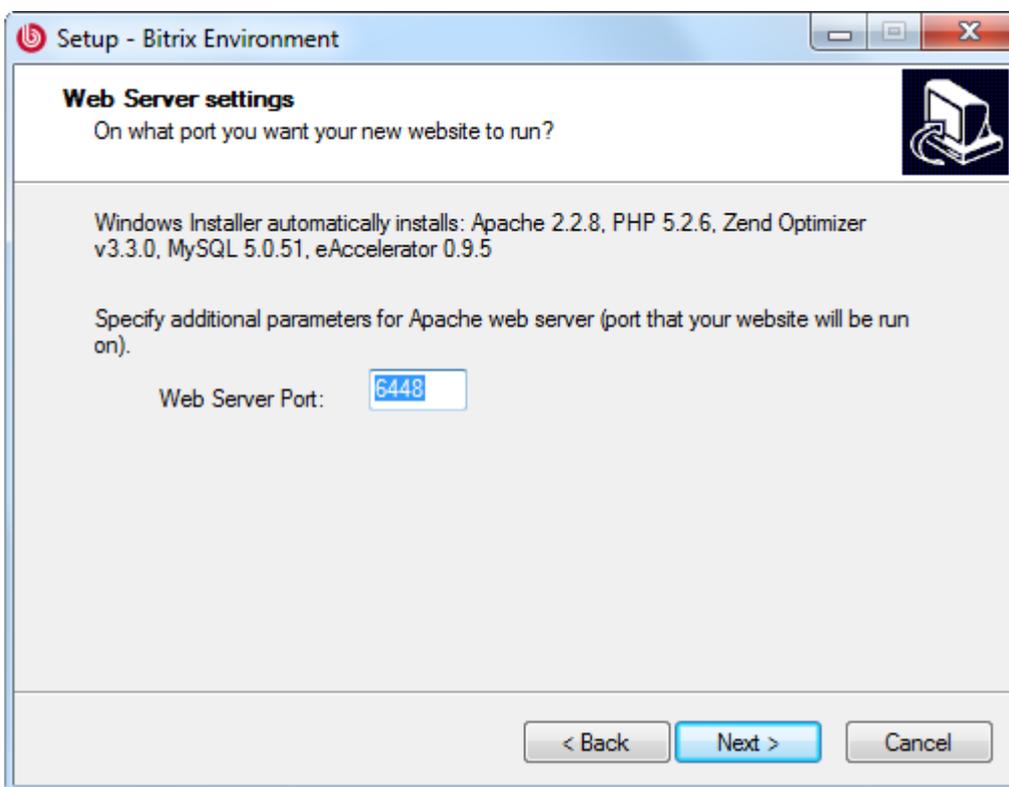


Fig. 2.6 Web server parameters

Here you can change the port at which you will connect to the Apache web server.

By default, the web server is configured to respond at port 6448. You can set any other port number (e.g. 6447) unless this port is not in use by other applications (e.g. IIS).

q Click **Next** to continue.

Step 7. Ready to install

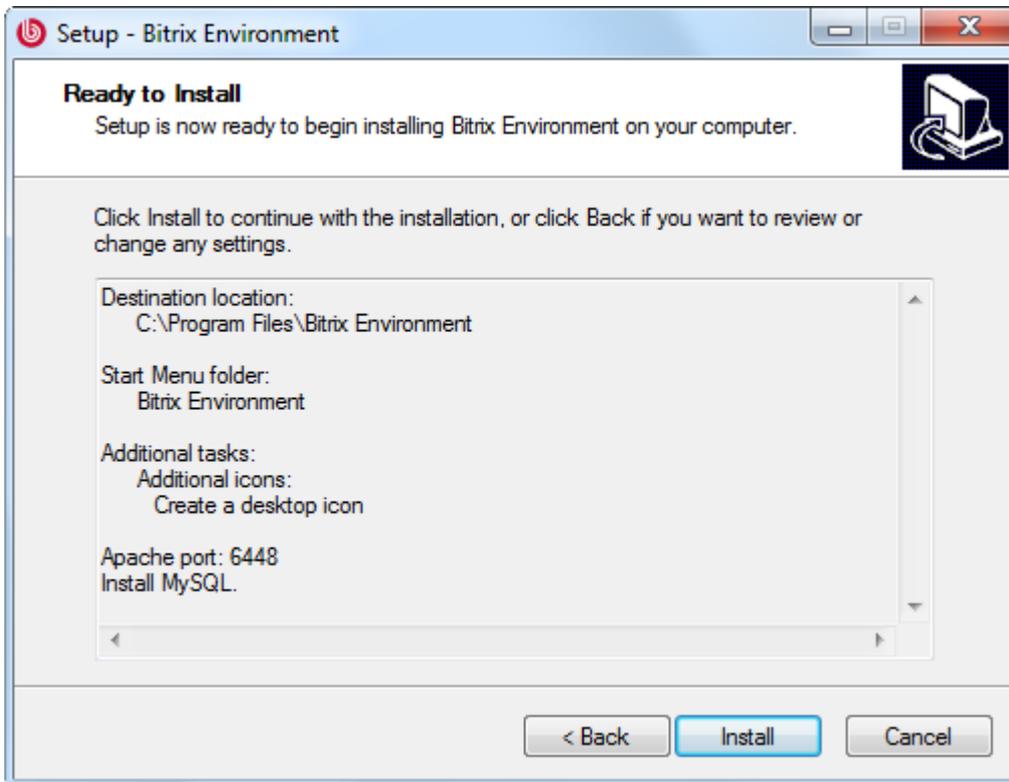


Fig. 2.7 The installation options review window

This window displays a summary of the installation preferences you have specified in the previous steps. If you need to change the installation preferences, click **Back**.

- If you accept the proposed settings, click **Install** to start installation. Wait until the wizard copies files to your machine.

Step 8. Final Step

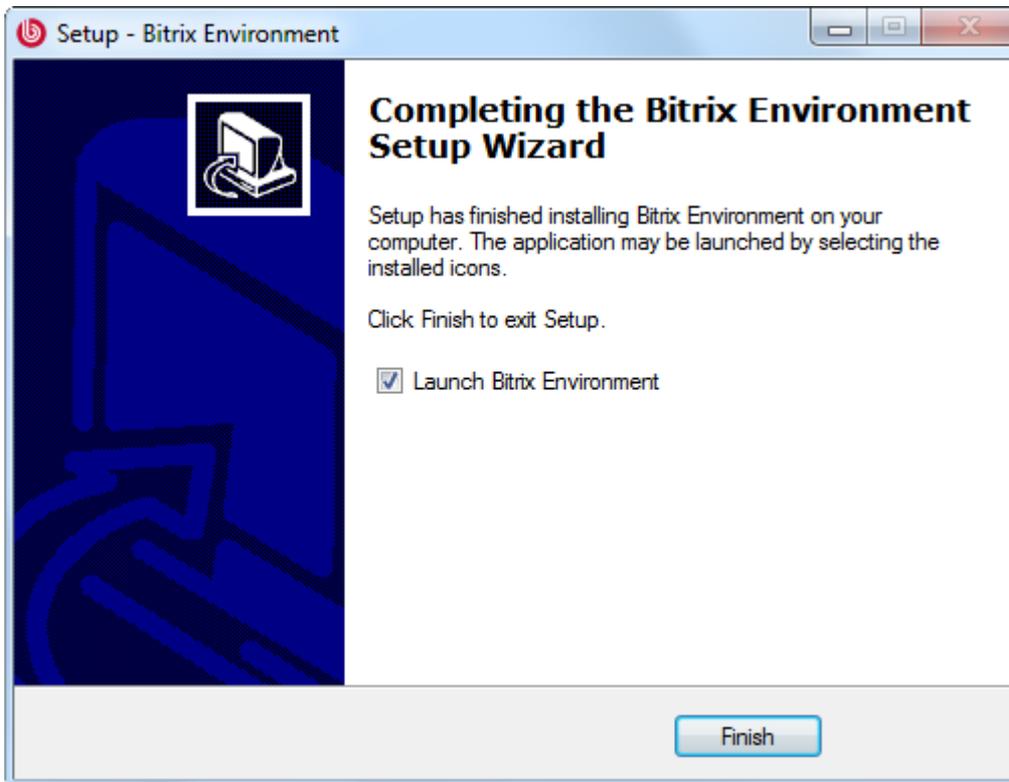


Fig. 2.8 The final step of the installation

This window informs that the Bitrix Web Environment files have been successfully copied to your machine.

- q To run Bitrix Web Environment right after closing the installation wizard, enable the **Launch Bitrix Environment** option.
- q Click **Finish** to quit the wizard.

Chapter 3.

Installing Bitrix Site Manager

All versions of Bitrix Site Manager are shipped as **.zip** and **.tar.gz** archive files for **PHP 5**. Please note that you have to choose the correct version to match your web server. For example, if you have Bitrix Web Environment installed on your server, download a Bitrix Site Manager version for **PHP 5**.

- Download Bitrix Site Manager installation package to your server or computer.
- Extract files from the archive to the root folder of your site.

The deflated files require, depending on the edition:

- § Start edition – 64 Mb;
- § Standard edition – 87 Mb;
- § Small Business edition requires 85 Mb;
- § Professional edition - 109 Mb;
- § Enterprise edition – 120 Mb of free disk space.
- § Premium edition – 113 Mb of free disk space.
- § Ultimate edition – 125 Mb of free disk space.

Also, remember to add for the size of the downloaded archive file.

Now, ensure your system corresponds minimum requirements.

1. If required, install **Apache** web server and configure it to support **PHP**. Bitrix Site Manager requires **Apache** version 1.3 or better and **PHP** 5.0.0 or better.
2. If required, install database engine (**MySQL** version 4.1.11 or higher, **Oracle** 10g or higher or **MSSQL** 9.0 (2005) or higher).
3. If you install a trial or encoded version, install and configure free **Zend Optimizer** version 3.3.0 or better.
4. If you install the **Oracle** version, ensure that the client part of **Oracle Database 10g Client** or higher is installed. Create a new user.
5. If you reinstall the system, remember to remove all tables.
6. Ensure that you have at least 10 MB of free disk space for the update system.

Attention! Bitrix Site Manager can only install and operate correctly if your system conforms these minimum requirements.

To start installation, open http://<your_site>/index.php in your browser. Replace here **<your_site>** with the real address of your site.

Step 1. The Initial Installation Screen

The first wizard window informs you that the installation is starting and displays the basic information about the product.

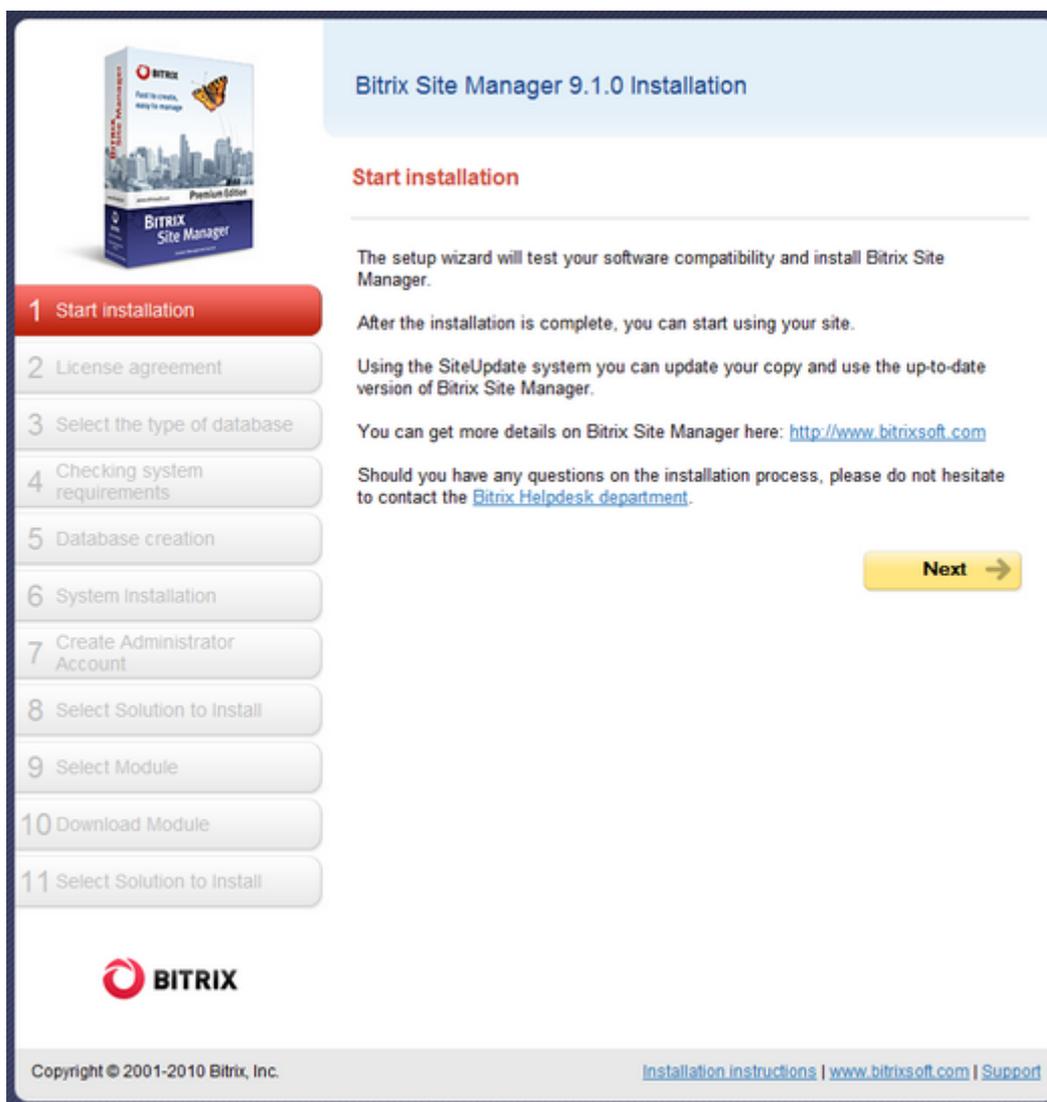


Fig. 3.1 The first step of the installation wizard

q Click **Next** to continue installation.

Step 2. The License Agreement

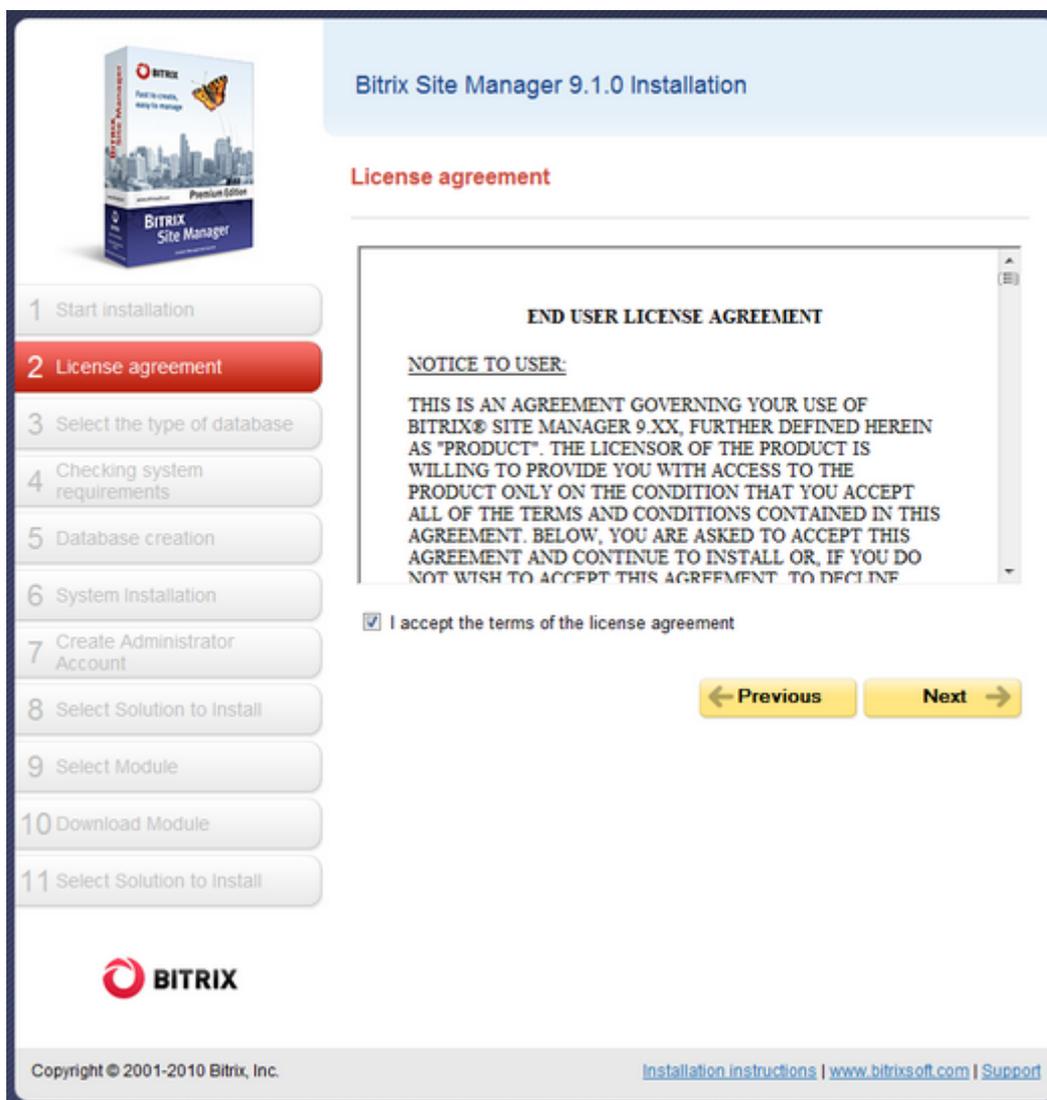


Fig. 3.2 The License Agreement

- q Read the Agreement carefully. If you accept the license terms, check the **I accept the License Agreement terms** box. You must accept the License Agreement to continue installation.
- q Click Next to open the next window of the wizard.

Step 3. License Key

Here you will have to enter your license key and select database for which the system will be configured.

Product Registration	
* License key:	<input type="text" value="XXX-XX-XXXXXXXXXXXXXXXXXXXX"/> If you have purchased the system, please enter the license key that you have received by e-mail.
Select the type of database	
* Database: Database to be installed	<input checked="" type="radio"/> MySQL <input type="radio"/> Oracle <input type="radio"/> Microsoft SQL Server The type of database that you select must conform with the type of your license key. Selecting wrong database type violates the license agreement and may result in partial or full malfunction of the site. If you install the trial version of the product (the DEMO key), you can choose any type of database.
UTF-8 Installation of Bitrix Site Manager	
<input checked="" type="checkbox"/> Install with UTF-8 encoding	

Fig. 3.3 License key and database

- q **License Key** field: if you have already purchased a license, enter the license key here. If you install the product for evaluation purposes, leave the default field value (DEMO).
- q **Choose database** field: select here the database you want to support. If you install the trial version, you can choose any database.

Attention!

MSSQL and **Oracle** databases are only available in **Premium** and **Ultimate** editions.

You must select the exact database type for which your license has been issued. Selecting any database type other than the one stipulated by the license violates the license agreement and can cause partial or full malfunction of your site.

The MSSQL database type will be available if only ODBC is supported by your system. Oracle databases require the OCI8 library (the file php_oci8.dll) to be installed. If your system does not meet these conditions, the MSSQL and/or Oracle database types will not be available.

Oracle and MySQL databases can be installed in UTF-8 encoding. If you choose to install UTF-8 version, mark the **UTF-8 Installation** option.

However, selecting UTF encoding requires the **mbstring** PHP module to be installed. You can verify the presence of this module by examining the contents of **php.ini** or **.htaccess** files:

php.ini

```
mbstring.func_overload=2  
mbstring.internal_encoding=UTF-8
```

.htaccess

```
php_value mbstring.func_overload 2  
php_value mbstring.internal_encoding UTF-8
```

q Click **Next** to continue.

Step 4. Preliminary Verification

The installation wizard checks your system for minimum requirements and displays advices on how to tune your system for optimum performance.

Checking system requirements

Required system parameters

Your system must meet the mandatory conditions. If any parameter displays in red, you have to check and fix it. Otherwise, proper functioning of the site is not guaranteed.

Parameter	Required	Current value
Web server version Apache	1.3 and higher	2.2.8
PHP version	5.0.0 and higher	5.2.6
PHP settings:		
- allow_call_time_pass_reference	On	On
- safe mode	Off	Off
Required PHP modules:		
- MySQL functions	Set	Set
- Regular Expression support (POSIX)	Set	Set
- Regular Expression support (Perl-Compatible)	Set	Set
For installation with UTF-8 encoding		
- Multibyte String	Set	Set
- mbstring.func_overload	>=2	2
- mbstring.internal_encoding	UTF-8	UTF-8

Checking the disk access

The site scripts must have write access to site files. This is required for proper functioning of the file manager, file upload and the update system that is used to keep the site kernel up-to-date.

Parameter	Value
Public section <i>C:/Program Files/Bitrix Environment/www</i>	Accessible for reading and writing
Site kernel <i>C:/Program Files/Bitrix Environment/www/bitrix</i>	Accessible for reading and writing
File <i>C:/Program Files/Bitrix Environment/www/index.php</i>	Accessible for reading and writing
Folder <i>C:/Program Files/Bitrix Environment/www/bitrix/modules</i>	Accessible for reading and writing

Fig. 3.4 Checking the system for minimum requirements

If your system does not match minimum requirements, the problem description in red will display on the top of the screen. The detailed description of the incompatibility can be found in the page body. You cannot continue installation until you fix the problem.

Attention! If you install the system in **UTF-8** encoding, ensure that the **mbstring.func_overload** parameter is **2**.

Recommended settings

These parameters are required to be set to their proper values to ensure your site is fully compatible with requirements.

Your site will be up and working even if some settings are incorrect. But if this is the case, some of the site features may become inaccessible.

Parameter	Recommended	Current value
Processing .htaccess	Enabled	Enabled
Site available disk space	more than 50 MB	10338.6 Mb
Recommended settings for PHP:		
- available memory	more than 32 MB, 64 Mb or more recommended	128 Mb
- allow file upload (file_uploads)	On	On
- show errors (display_errors)	On	On
- escaping for Sybase (magic_quotes_sybase)	Off	Off
Recommended PHP modules:		
- Zlib Compression	Set	Set
- GD Library (graphic library)	Set	Set
- Free Type Library	Set	Set

Fig. 3.5 Recommended settings

If your system does not match the recommended settings, you *can* still proceed with the installation. The installer will show the potentially incorrect settings. However, it is strongly recommended that you bring these settings into line with the recommended values. You can verify the system preferences in the **Site Check** form in Control Panel.

q Click **Next** to continue.

Step 5. Database Creation

Here the license file and the database connection configuration file are created; the database is populated with data.

The fields in the **Database parameters** group vary depending on the chosen database type. Other fields are common to all databases.

1. MySQL database parameters

Database settings	
* Server:	<input type="text" value="localhost"/> Server where database system is working
Create user to connect to database	<input checked="" type="radio"/> Existing user <input type="radio"/> New user
* User name:	<input type="text"/> Login to connect to database
Password:	<input type="text"/> Password to connect to database
Create database:	<input checked="" type="radio"/> Existing <input type="radio"/> New
*Existing database:	<input type="text" value="sitemanager"/> Database name where Bitrix will be installed
Database tables type:	<input type="text" value="standard"/>

Fig. 3.6 MySQL configuration parameters

If you install Bitrix Site Manager on a local machine and have the required applications (**Apache**, **PHP**, **MySQL**, **Zend Optimizer** for the trial versions), or Bitrix Web Environment installed:

§ **Server:** the address of a server that hosts the database engine (**MySQL** in this case). This value is usually "localhost" for local servers, and the port number in the format **localhost:[port]**. You can find the port number in the **MySQL** configuration files.

Important! When installing Bitrix Site Manager on Bitrix Web Environment, type **localhost:31006** in this field.

§ **Database user:** select to create a new user;

§ **User name:** type here any desired database user name (login) that will be used to access the database.

§ **Password:** the database user password.

§ **Database:** select to create a new database.

§ **Database name:** the name of the database to which the product will be installed.

- § **Type of database tables:** standard tables are generally good for most use cases.
- § Select Create new database. A new group of fields will appear: Administrator login and password.
- § Type **root** in the **Login** field.
- § The **Password** field must be empty.

If you install Bitrix Site Manager on a remote server, consult the hosting service provider for the database parameters. Specifically, you should obtain values for the following fields:

- § **Server address;**
- § **Database user:** consult whether you need to create a new database user;
- § (database) **User name;**
- § (database) **Password;**
- § **Database:** consult whether you need to create a new database;
- § **Database name;**
- § Type of database tables.

Standard tabled are optimum for most cases. However, web shops are observed to perform better with InnoDB tables.

Attention! If you need to create a new database user or a new database, the database user name and password fields are required. If no database exists yet, you must create a new one (by selecting the appropriate option). However, new databases are usually created by the hosting service techsupport. You will only have to obtain the user name, password and connection parameters.

2. Oracle database parameters

- § **Connection string:** this field should contain either the name of a local Oracle instance, or the record name in **tnsnames.ora** to connect to. Example of the name of a local Oracle instance:
§ `(DESCRIPTION = (ADDRESS_LIST = (ADDRESS = (PROTOCOL = TCP)(HOST = 000.000.0.00)(PORT = 0000)))(CONNECT_DATA = (SERVICE_NAME = BX)))`.
- § **Database user:** if checked, a new database user will be created. Otherwise, an existing user will be used.
- § **User:** a user name (login) of the database user used to access the database.
- § **Password:** a user password to access the database.

Note! If you choose to create a new database or database user, you will have to provide the database administrator's login and password. The database administrator's user name and password are used only at the installation and database creation time. This information is not stored in the system.

3. MSSQL database parameters

Database settings	
* DSN:	<input type="text" value="localhost"/> For example: DRIVER=SQL Native Client; SERVER=BX
Create user to connect to database	<input checked="" type="radio"/> Existing user <input type="radio"/> New user
* User name:	<input type="text"/> Login to connect to database
Password:	<input type="text"/> Password to connect to database
Create database:	<input checked="" type="radio"/> Existing <input type="radio"/> New
*Existing database:	<input type="text" value="sitemanager"/> Database name where Bitrix will be installed

Fig. 3.7 MSSQL configuration parameters

§ **DSN:** a database connection string. The string should contain, at least, the connection driver parameters and the server name. Optionally, you can include the user name, password or other parameters.

Note! Sometimes you would need to specify a user DSN name here (a connection must be created in advance).
 For local servers (if the product is installed on the same server as the database), this parameters usually has a value of **localhost**;

- § **Database user:** if checked, a new database user will be created. Otherwise, an existing user will be used.
- § **User:** a user name (login) used to access the database.
- § **Password:** a user password to access the database.
- § **Create database:** check this option if you want to create a new database.
- § **Database name:** type the name of the database to which the system will be installed.

Note! If you choose to create a new database or database user, you will have to provide the database administrator's login and password. The database administrator's user name and password are used only at the installation and database creation time. This information is not stored in the system.

4. Additional parameters

These parameters define permissions to assign to all files and folder of the site. They are common to all database types.

Additional parameters	
File access permissions:	<input type="text" value="0644"/> Enter permissions enough for write access to server files
Folder access permissions:	<input type="text" value="0755"/> Enter permissions enough for write access to server folders

Fig. 3.8 Additional configuration parameters

- § **Access permission for site files:** Permissions that will be applied to all newly created files. Access permissions should allow the web server to write to files. The default value is **0644**;
- § **Access permission for site folders:** Permissions that will be applied to the newly created folders. Access permissions should allow the web server to write to folders. The default value is **0755**.

Note: you can alter the database connection parameters manually by editing the file **/bitrix/php_interface/dbconn.php** which is created upon installation.

q Click **Next** to continue.

Step 6. Installing the System

At this stage, the wizard creates the database and copies the system files. You can watch the process proceeding in the progress bar. Upon completion, the wizard will switch to the next step automatically.

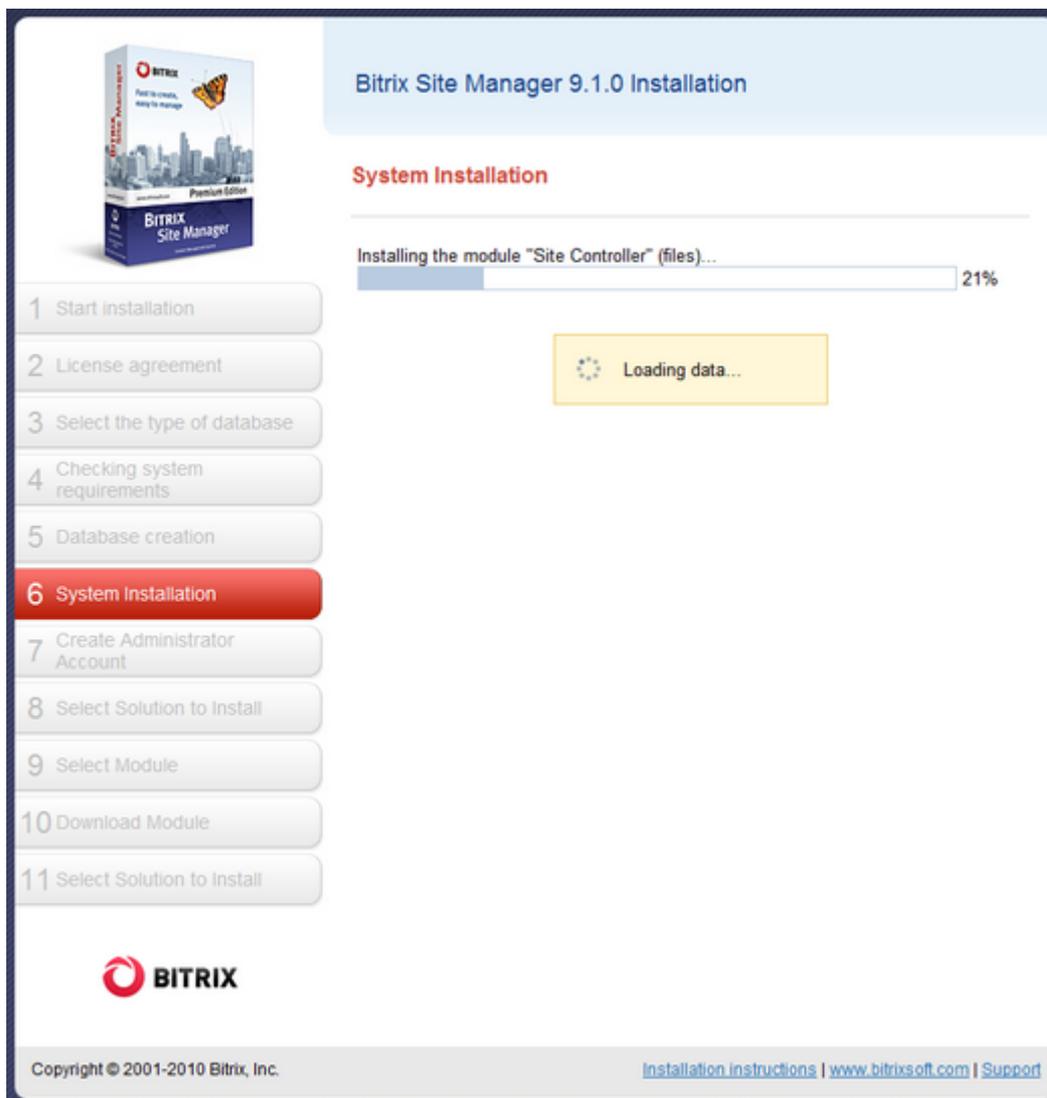


Fig. 3.9 Installation process

Step 7. Creating The Website Administrator Account

Here you will configure the web site and create a web site **administrator's** account. The administrator's account provides full access to web site management and configuration. After the installation is complete, you can create more users with less permissions.

Site administrator settings	
* Login (min. 3 characters):	<input type="text" value="admin"/>
* Password (min. 6 characters):	<input type="password" value="••••••"/>
* Confirm password:	<input type="password" value="••••••"/>
* E-mail:	<input type="text" value="admin@email.com"/>
Name:	<input type="text" value="Administrator"/>
Last name:	<input type="text"/>

Fig. 3.10 Creating the administrator's account

Note: fields marked with asterisk (*) are required.

- § **Login:** the site administrator login to access the Control Panel pages. Must contain at least 3 symbols;
- § **Password:** the site administrator password. Must contain at least 6 symbols;
- § **Confirm password:** type the password again to validate it.
- § **E-Mail:** the address of the site administrator's e-mail account;
- § **First name, Last name:** the real name of the site administrator.

Note! You will use the provided password and login to authorize in Control Panel.

q Click **Next** to continue installation. A **Site Creation Wizard** will open.

Step 8. Installing Solutions

Here you will have to select a web solution to be installed. Fig. 3.11 shows an example of the solution choice menu.

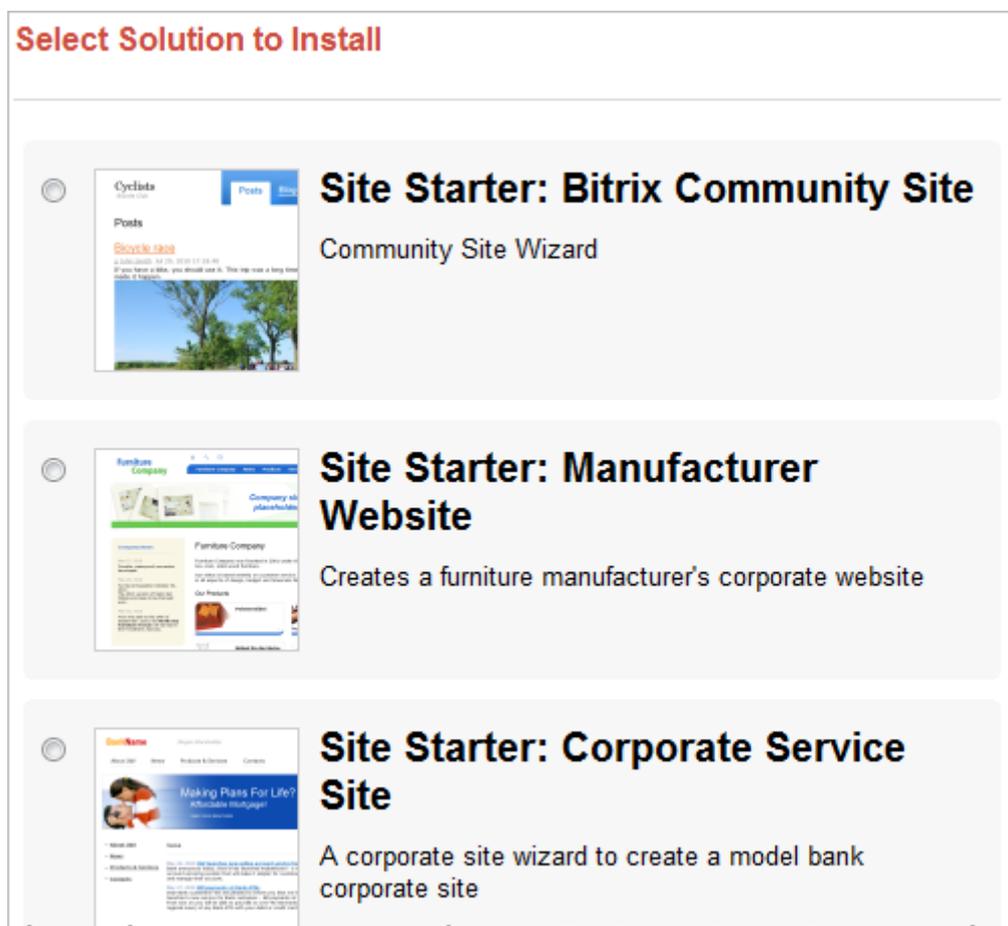


Fig. 3.11 A choice of solutions at the installation time

q Select the solution you find most appropriate for your website.

After you click the **Next** button, the site creation wizard will show up, depending on your choice:

- § **Community Site Wizard** is a neat solution for you to create a social community website, such as, for example, coffee lovers club, book readers club and so on.
- § **Corporate Service Site Wizard** is a solution oriented to non-manufacturing companies. The wizard creates a sample website to provide banking services.
- § **Manufacturer's Corporate Website Wizard**, on the contrary, is a solution oriented to industrial companies. The wizard creates a exemplary website to represent a furniture manufacturer.
- § **Personal Site Wizard** creates a website devoted to solely represent a person in the Internet.

- § **Download From Marketplace** is a special option to download and run the website solution from **Bitrix Marketplace**.
- § **Online Store Wizard** is a perfect choice for companies willing to sell their products online.

Online Store Wizard and **Manufacturer's Corporate Website Wizard** share common steps therefore this guide discusses only upon the online store wizard.

Community Site Wizard and **Corporate Service Site Wizard** are not discussed here as well because they are similar to **Personal Site Wizard**.

Personal Site Wizard

Step 1. The Design Template

Select here the design template for use with the website. The templates vary not only in the look; some may have different settings.

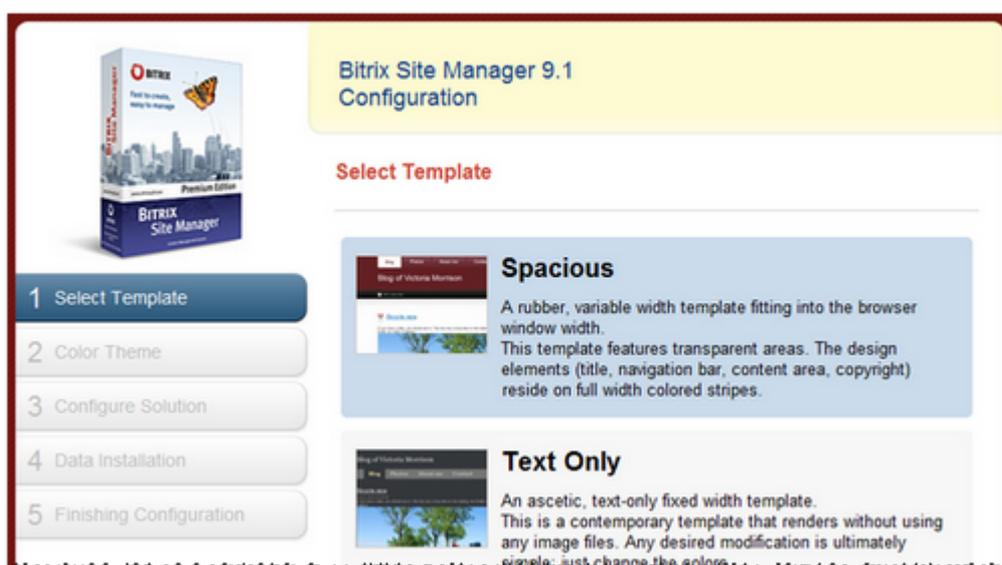


Fig. 3.12 Design template selection

q Select the design template and click **Next**.

Step 2. The Color Theme

Each design template allows different colors of your choice. Different templates provide different color sets (fig. 3.13).

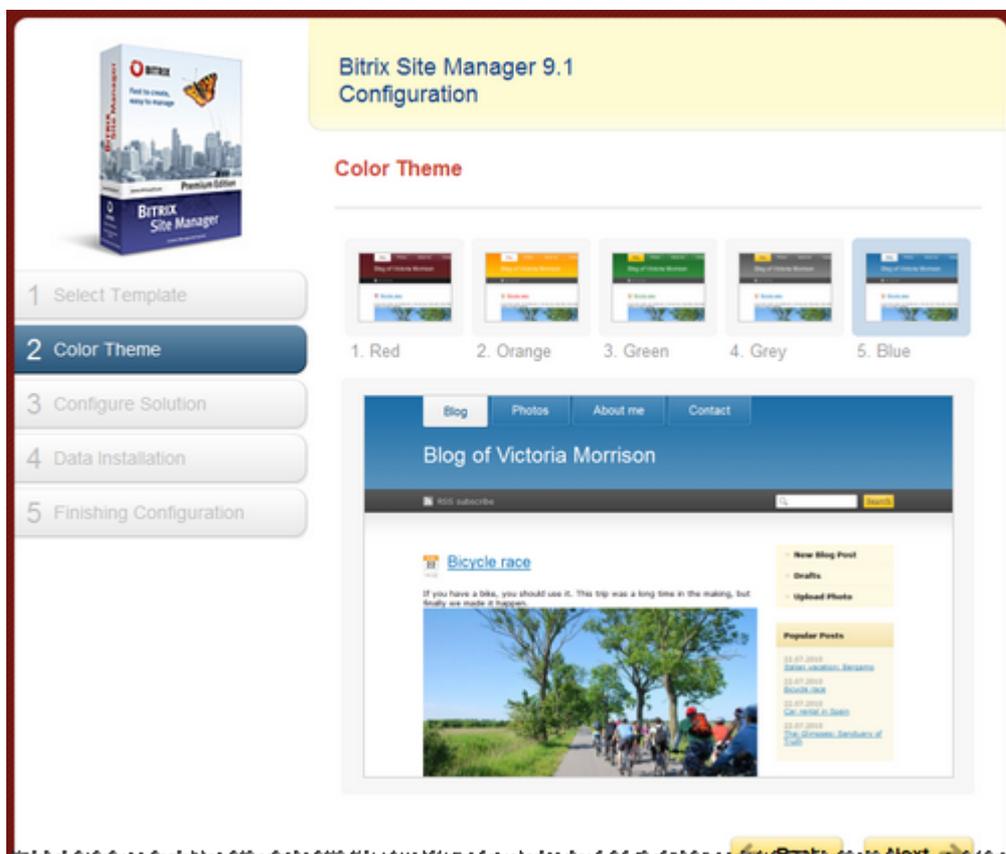


Fig. 3.13 Selecting a color theme

- q Select the color theme you find most appropriate for your website and click **Next**.

Step 3. Providing Basic Information

This is the step when you specify the website name and the owner name (fig. 3.14).

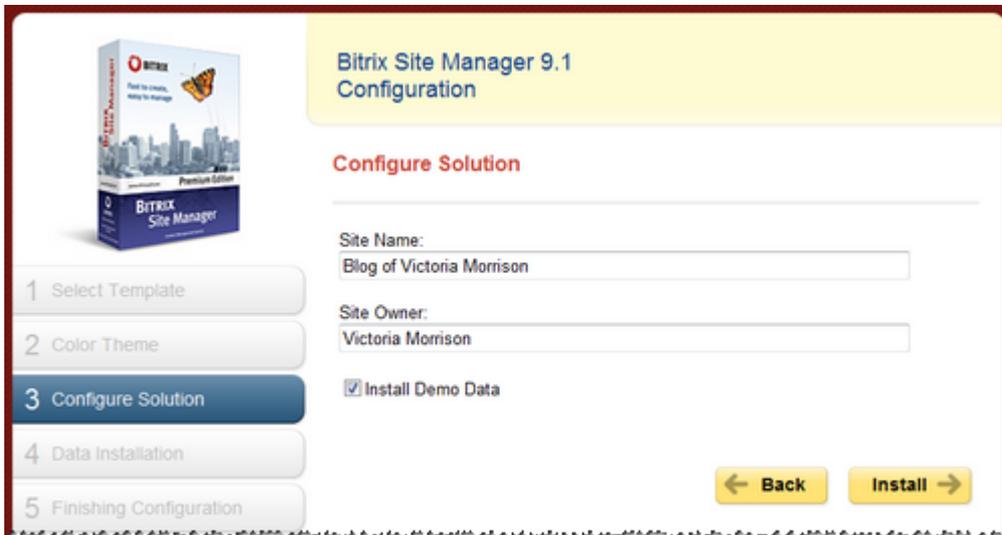


Fig. 3.14 Basic information supplied to the solution

- q Fill in the **Site Name** and **Site Owner** fields.
- q If you install the system for evaluation purpose, you may want to **install demo data** to get a quick glance at the website right after the installation.
- q Click **Install** to proceed.

Step 4. Installation And Copying

This step is fully automated not requiring your assistance (fig. 3.15). After the installation is complete, the wizard will move to the next step.

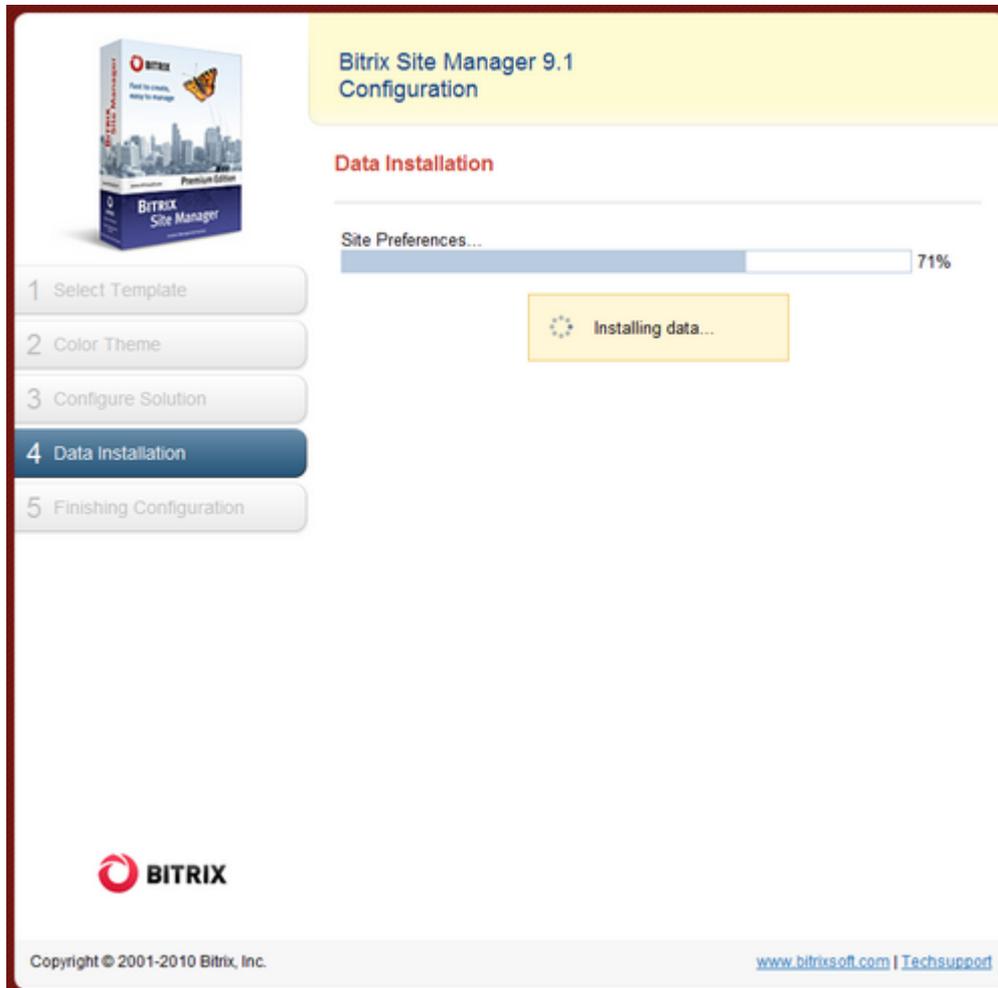


Fig. 3.15 The solution being installed

Step 5. The Final Step

This screen informs you that the solution installation has been completed successfully (fig. 3.16).

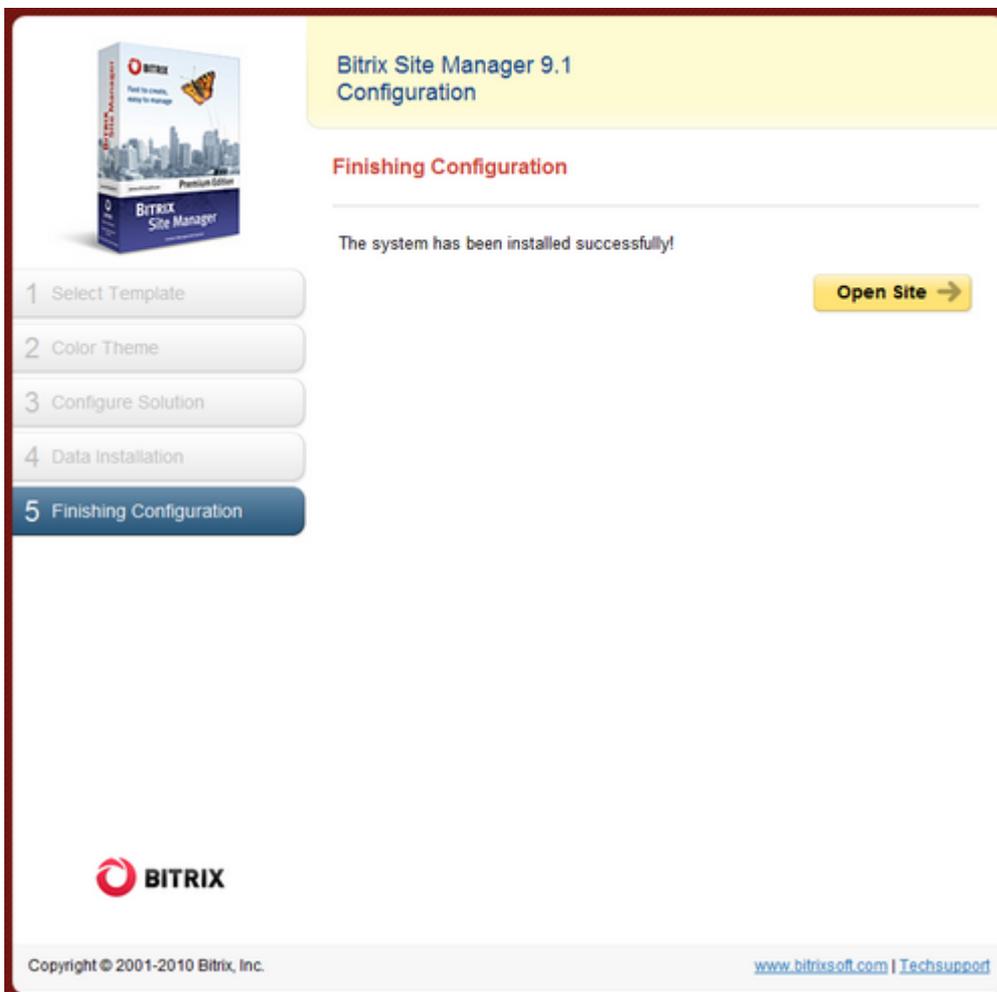


Fig. 3.16 The final step

- q Click **Open Site** to view the main page of your site.

Online Store Wizard

Online Store Wizard and **Manufacturer's Corporate Website Wizard** share common steps with one minor distinction which will be noted below.

Step 1. The Design Template

This is the first step. Select here the design template for use with the website.

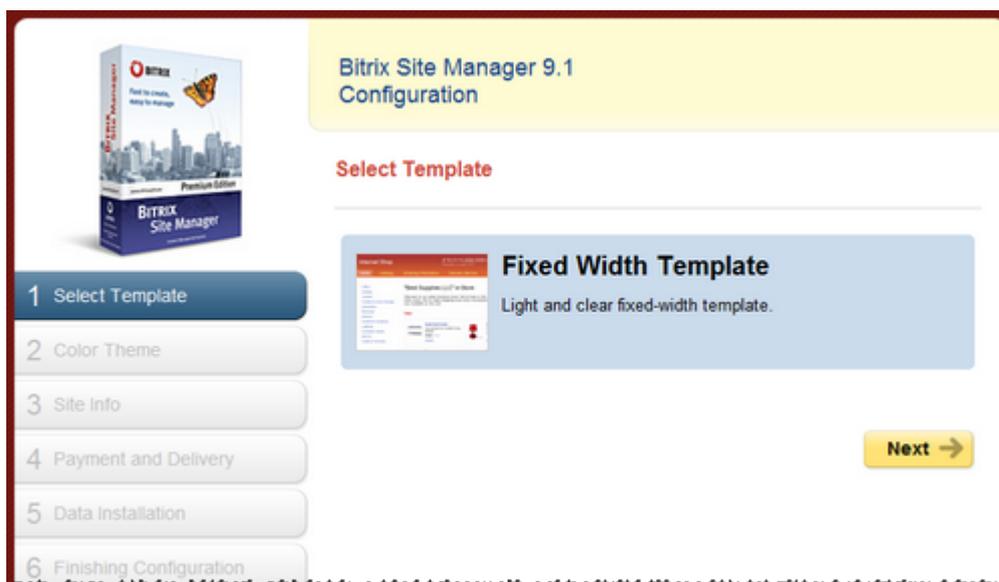


Fig. 3.17 The initial installation step

q Select the required template and click **Next**.

Step 2. The Color Theme

Now select (fig. 3.18) the color for the previously specified template. The preview pane below the color palette shows how your site will look with the current color applied.

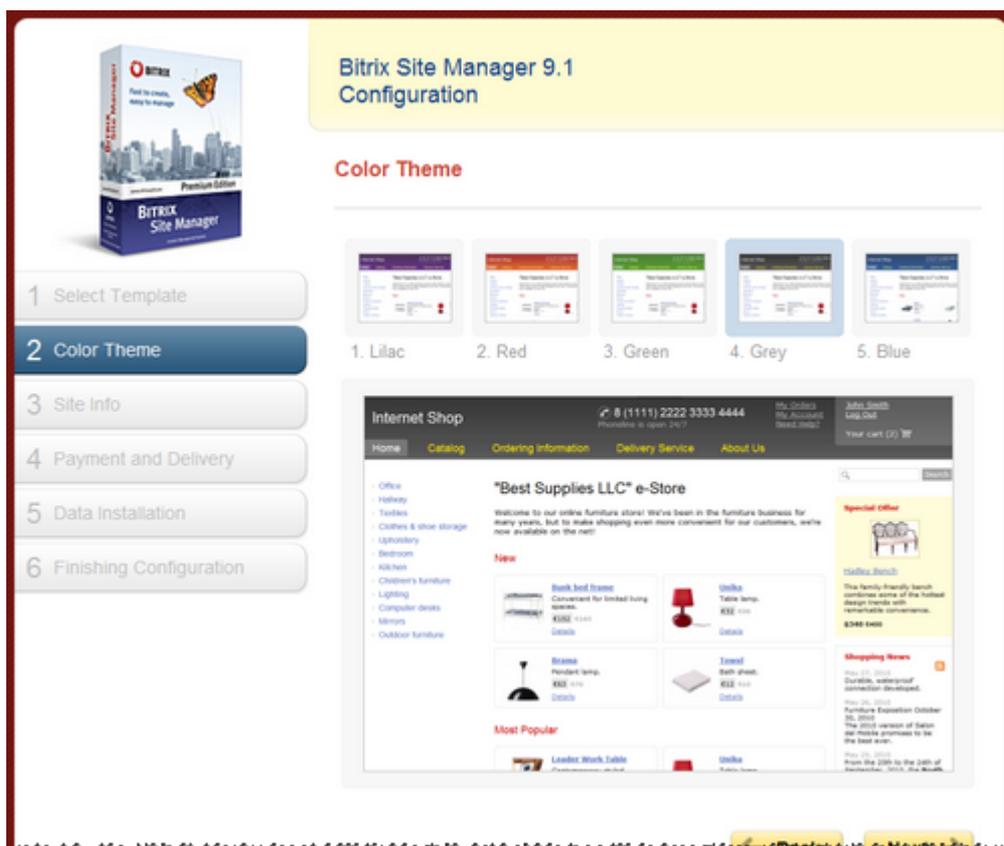


Fig. 3.18 The second step

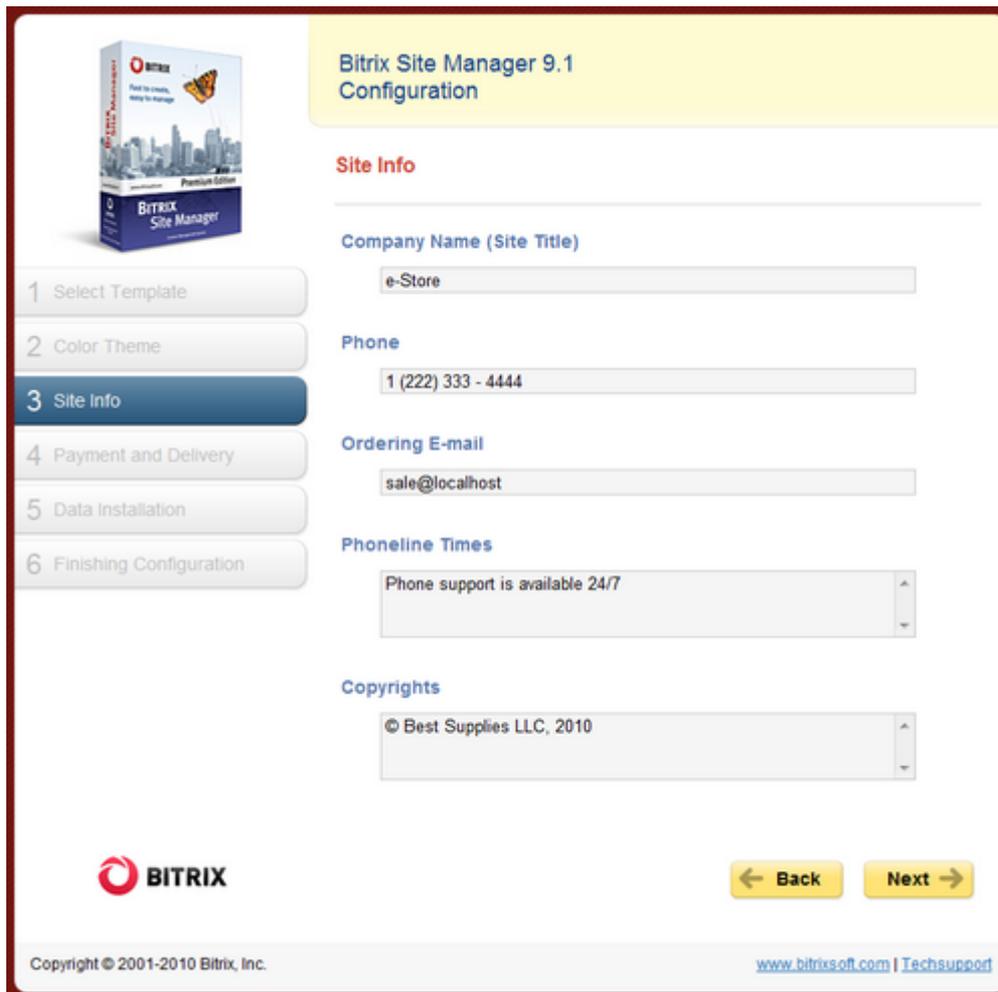
q Select the color you like most and click **Next**.

Step 3. Company Information

This step is where **Online Store Wizard** and **Manufacturer's Corporate Website Wizard** differ.

Online Store Wizard

Provide basic information about your web store (fig. 3.19). Note that this data will be visible as-is to your site visitors.



Bitrix Site Manager 9.1 Configuration

Site Info

1 Select Template

2 Color Theme

3 Site Info

4 Payment and Delivery

5 Data Installation

6 Finishing Configuration

Company Name (Site Title)
e-Store

Phone
1 (222) 333 - 4444

Ordering E-mail
sale@localhost

Phoneline Times
Phone support is available 24/7

Copyrights
© Best Supplies LLC, 2010

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Fig. 3.19 The Online Store Wizard's step 3

q Fill in the form fields and click **Next**.

Manufacturer's Corporate Website Wizard

Feed the wizard with the company identity information here.

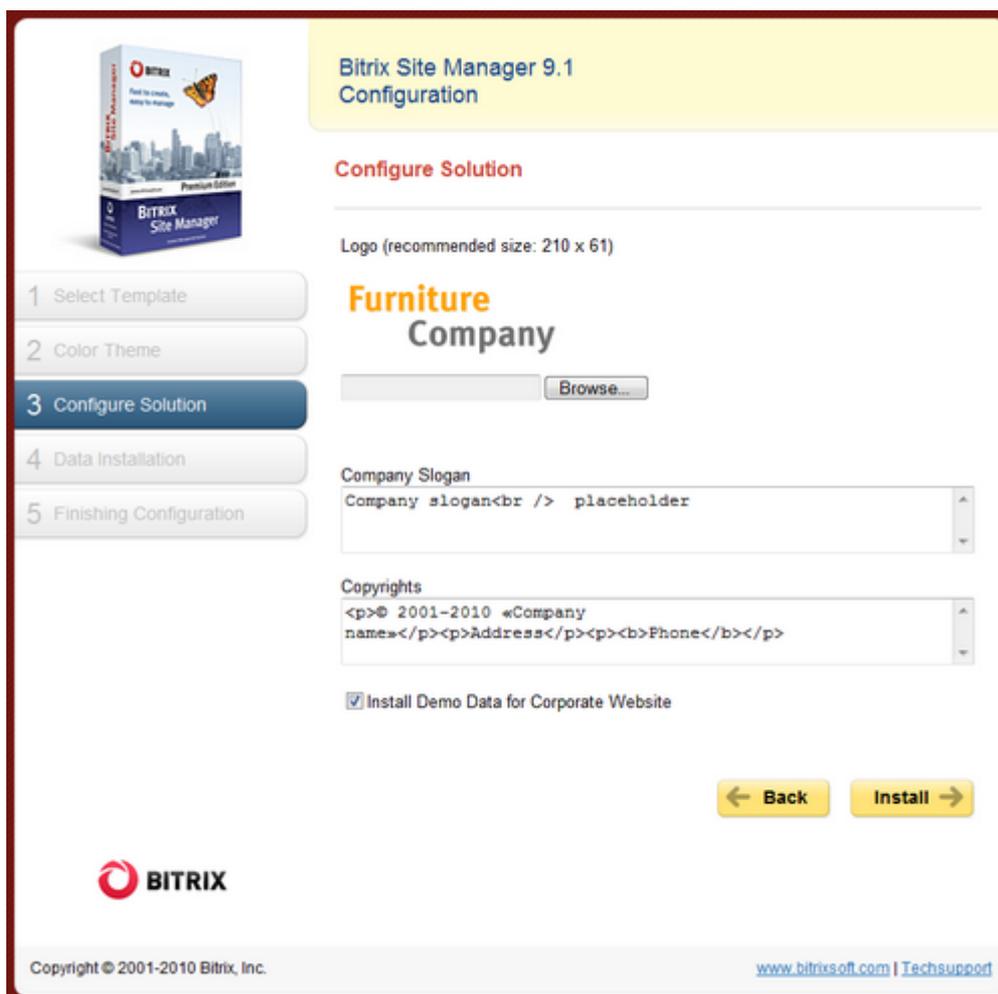


Fig. 3.20 The Corporate Website Wizard step 3

- q Fill in the form fields. Do not forget to upload the logo.
- q If you install the website for a specific company or project, select to not install demo data by unchecking the corresponding box.
- q Click **Next**.

Step 4. Configuring The Online Store Options

This step (fig. 3.21) is peculiar to **Online Store Wizard** only.

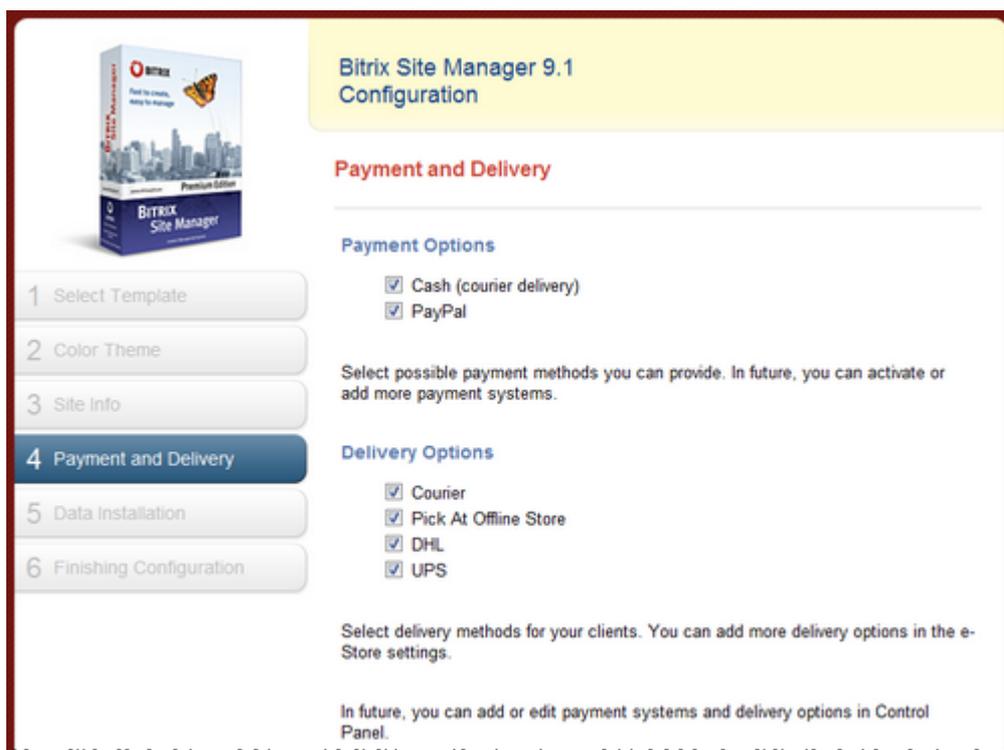


Fig. 3.21 The Online Store Wizard's step 4

q Fill in the form fields and click **Next**.

Step 5. Installing And Copying

At this step, the system is installing the solution. After the installation is complete, the wizard will move to the next step.

Step 6. The Final Step

This screen informs you that the solution installation has been completed successfully.

q Click **Open Site** to quit the wizard and open the main page of your website.

Chapter 4.

Evaluation Of And Migration To Other Solutions

The solution you selected and installed can be changed whenever required. Just click **Test A New Solution** on the public section toolbar (fig. 4.1).

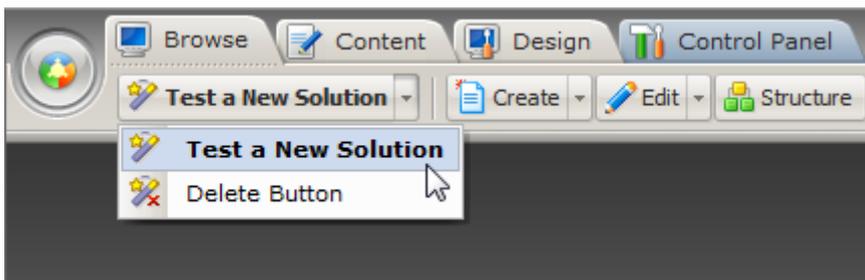


Fig. 4.1 Starting to change the active solution

- q Click **Test A New Solution**. The system will create a new site and show the **Select Solution To Install** screen (see [Step 8](#)).
- q Select the solution and click **Next**. The system will start the wizard to help you configure and install the solution.

Note: if you feel you will never want to change or test a solution, you can delete this command from the toolbar by selecting the Delete Button command as shown on fig. 4.1.

Chapter 5.

Side-by-side Installation Of Bitrix Site Manager

If you need to install and run multiple instances of Bitrix Site Manager (e.g. different editions), or any other sites using Apache web server, you can easily accomplish this using a single installation of Bitrix Web Environment.

Do the following to configure Bitrix Web Environment for multi-system usage.

- q Create a folder in **C:\Program Files\Bitrix Environment**. The folder can have any name.
- q Add the following lines to `httpd.conf` (in `C:\Program Files\Bitrix Environment\apache\conf\`):

```
Listen 81
<VirtualHost *:81>
    ServerName localhost
    DocumentRoot "C:\Program Files\Bitrix Environment\folder_name"
</VirtualHost>
```

Here, 81 is the port number. The port must be specified twice: with the **listen** and **VirtualHost** directives. You can specify any vacant port number on the range 1 – 65535 to create a virtual host.

After you have finished the configuration, you will have to restart Bitrix Web Environment.

You can create as many sites as needed. The only thing to do is create a site folder and add a record to **httpd.conf** specifying a new port number for every new site.

In the example above, a new site can be accessed at `http://localhost:81`. Other sites are also available at http://localhost:port_number.

Additionally the following section in **httpd.conf** file should be changed:

```
<Directory>
    Option FollowSymLinks
    AllowOverride None
</Directory>
```

Replace `AllowOverride None` with `AllowOverride All` !

Chapter 6.

Installation Using BitrixInstall

Bitrix Site Manager can be easily installed at a remote server by uploading the installation files via the FTP or using the **BitrixInstall** script. In the first case, download the commercial or trial version and unpack it at a local machine. Then, use any FTP client to upload the extracted files to the root folder of your web server. Otherwise, upload the archive to the server and extract files remotely.

However, we strongly recommend that you use the special **BitrixInstall** script to avoid upload errors and eliminate a frequently occurring problem of different FTP and Apache user access permissions.

BitrixInstall uploads the trial or commercial version of Bitrix Site Manager to your site directly from www.bitrixsoft.com without the intermediate downloading step. Furthermore, the script can extract files from the installation package if you cannot access your site via SSH or third-party software.

- q Open the page <http://www.bitrixsoft.com/download/cms/index.php#tab-bxsetup-link> containing product downloads.
- q Click the **Download** link.
- q Select **Save** in the download dialog box.
- q Save the file as **bitrixinstall.php**.
- q Establish an FTP connection to your server.
- q Upload the downloaded file to the root directory of your web server.
- q In your browser, type **http://<your_site>/bitrixinstall.php** (replace [<your site>](#) with the real site name) and press Enter. The browser will display a **BitrixInstall** welcome page.

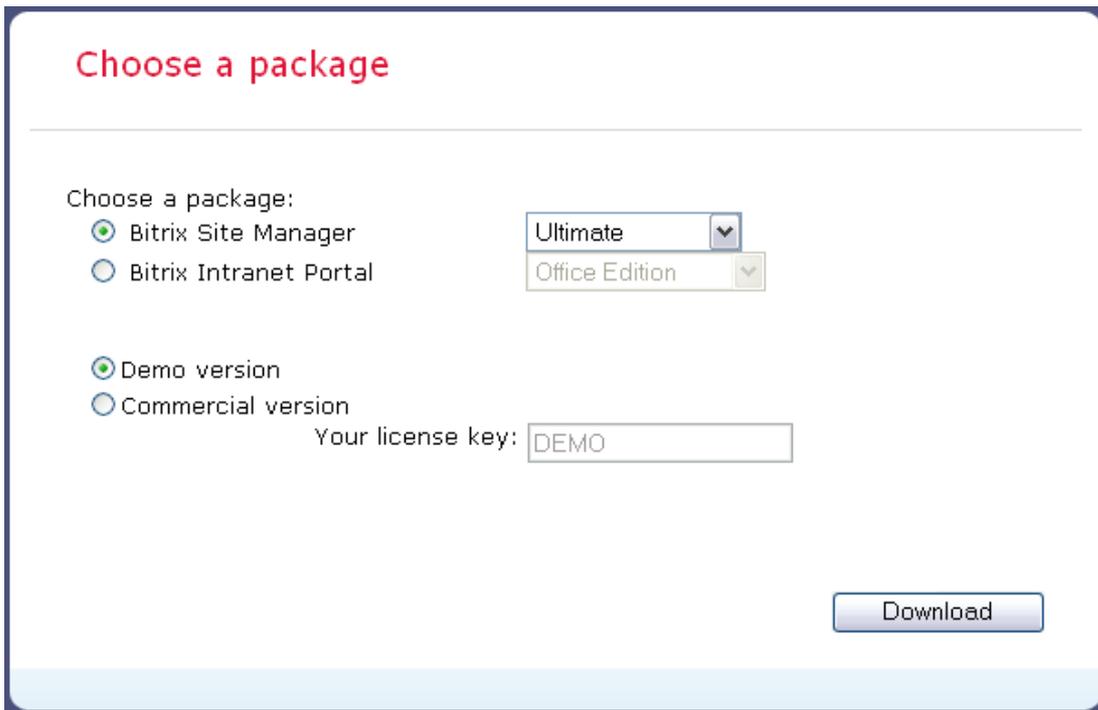


Fig. 6.1 The BitrixInstall welcome page

Warning! Please ensure that your web server has enough permissions to create and write files.

- q Click **Bitrix Site Manager** in the **Choose a package** group and select the product edition in the drop-down list beside.
- q Select the product version: evaluation or commercial.
If you select the commercial version, enter your license key.
- q Click **Download**. BitrixInstall will start uploading the distribution files to the server.

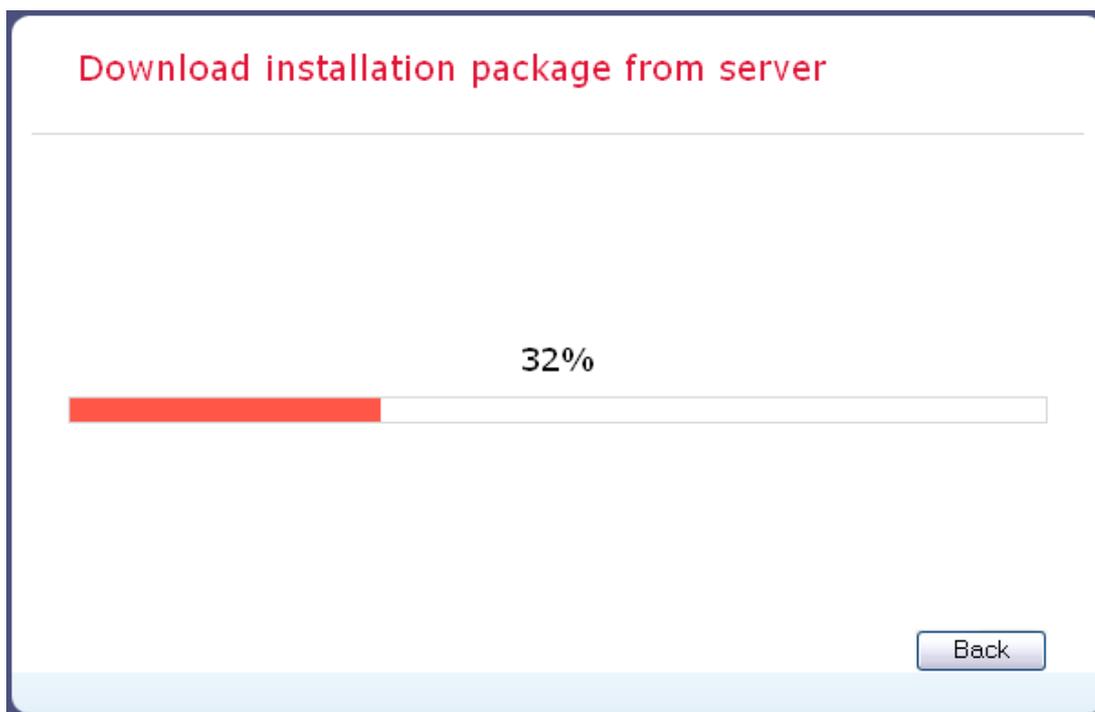


Fig. 6.2 Downloading the installation package using BitrixInstall

BitrixInstall will connect to the Bitrix server directly.

The **Back** button, when clicked, allows to get back to package selection if you need to change the upload parameters.

The files of the selected product edition will be copied to the root directory of your server and unpacked. Upon completion, the **Installation Wizard** will open in the default system browser (see [The Initial Installation Screen](#)).

Important! For security reasons, **bitrixinstall.php** will be deleted from the root directory of your server after file extraction is done.

Chapter 7.

Registration Procedure

Before you start using the commercial version, you have to activate your license key. If you install the trial version, you can omit registration yet it is recommended that you proceed to enable system updates during the trial period.

Registering The Commercial Version

Registration entitles you to obtain latest system updates and receive support from the Bitrix technical support service.

Moreover, having your commercial copy registered you can access the Bitrix private forum where users and Bitrix developers communicate and discuss important issues, resolve user's problems.

To register your copy:

- q Open Control Panel.
- q Click *Settings* -> *Update* to open the system update form.

Since your copy is not registered yet, you will see the following error message:

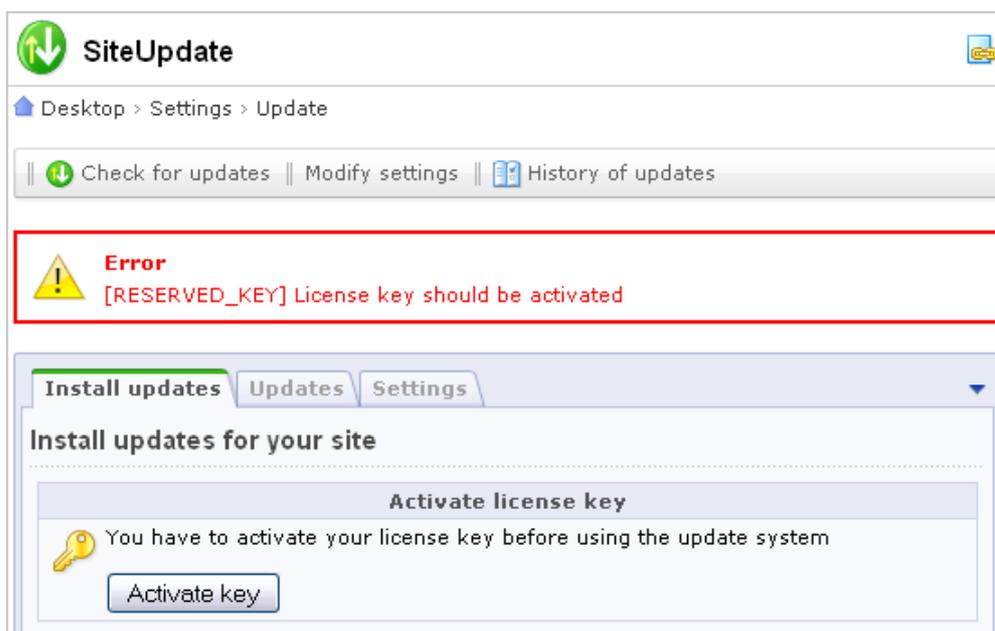
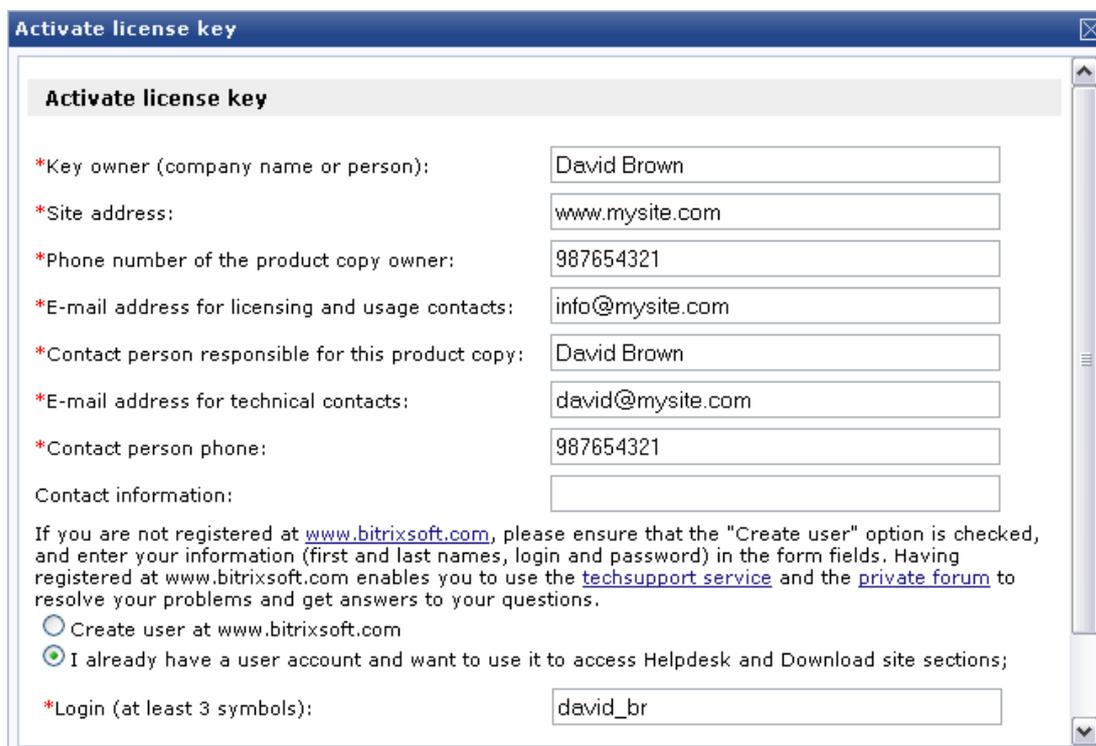


Fig. 7.1 License key activation message

Below this message is the license key activation form:



Activate license key

*Key owner (company name or person): David Brown

*Site address: www.mysite.com

*Phone number of the product copy owner: 987654321

*E-mail address for licensing and usage contacts: info@mysite.com

*Contact person responsible for this product copy: David Brown

*E-mail address for technical contacts: david@mysite.com

*Contact person phone: 987654321

Contact information:

If you are not registered at www.bitrixsoft.com, please ensure that the "Create user" option is checked, and enter your information (first and last names, login and password) in the form fields. Having registered at www.bitrixsoft.com enables you to use the [techsupport service](#) and the [private forum](#) to resolve your problems and get answers to your questions.

Create user at www.bitrixsoft.com

I already have a user account and want to use it to access Helpdesk and Download site sections;

*Login (at least 3 symbols): david_br

Fig. 7.2 Activation form

Note: fields marked with asterisk (*) are required.

Fill in the following fields.

- § **Company name:** specify here the name of a company that is the key owner. If the owner is a private person, type their full name here;
- § **Contact e-mail address:** type the e-mail address for possible correspondence with Bitrix specialists;
- § **Contact information:** here you can provide any additional information you find important: additional e-mail address; postal address; phone number etc.;
- § **Address of the site for use with the key:** type here the URL of the site that will be managed using this copy (which essentially means this license key) of Bitrix Site Manager;
- § **Create user at www.bitrixsoft.com:** check this box if you have not registered at the Bitrix web site yet. If so, you will be registered there upon successful activation with the provided personal information. As has been said before, registration enables you to contact the techsupport service directly and post to the private forum.

q Click **Activate license key**. Now the license is active; you can start using your site.

Registering The Trial Version (DEMO)

If you install the trial version, you will see the **License not found** message when opening the **Settings -> Update** page.

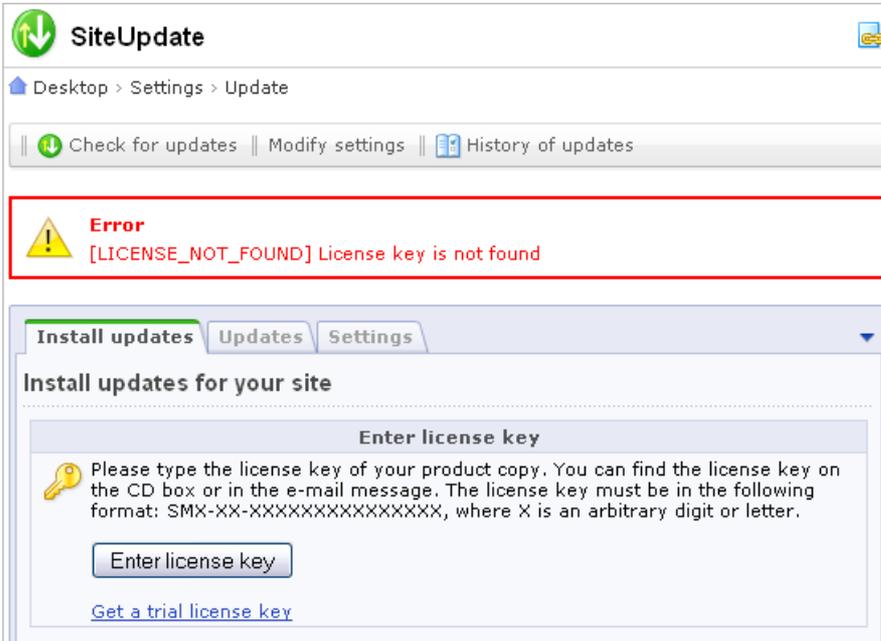


Fig. 7.3 The error notification and the trial key acquisition link

Essentially, a local trial version does not require that you obtain a license key. It only enables the system to receive updates. Obtaining a trial key requires that you register at the Bitrix web site.

- q Click **Get trial license key**. This will open the trial registration page at the Bitrix web site.

The form is titled 'Registration of the Trial version'. It contains the following fields:

- Last name*: John
- Name*: Patterson
- Email*: webmaster@mysite.com
- Company: JobCity
- Phone: 987654321
- Web-site*: http://www.jobcity.com
- License type*: Ultimate Edition (dropdown menu)
- Database type*: MySQL (dropdown menu)
- Oracle XE / MS SQL Express:

A 'Send' button is located at the bottom of the form.

Fig. 7.4 Trial registration form

q Fill in the form fields.

- § **Last name, Name:** specify your last and first names;
- § **E-mail:** specify your e-mail address. The trial key will be sent to this address;
- § **Company:** the company name;
- § **Phone:** the phone number;
- § **Web-site:** specify the exact address of a site that runs the trial version of the system;
- § **License type:** select the version of the product you have just installed.
- § **Database type:** select the type of the database on which the system runs.

If you use free versions of Oracle XE / MS SQL Express, enable the **Oracle XE / MS SQL Express option**.

Complete the form and click **Send**. The system will inform you that your request is now put in the submission queue.

A message containing the license key and the period of validity will be sent to the address you have previously specified in the trial registration form. You can copy and paste this key in the Control Panel form where you clicked the **Get trial license key** link, or in the Kernel module settings page.

- q Open Control Panel.
- q Open the **Kernel** module settings page: Settings > System settings > Module settings.
- q Open the Update System tab.
- q Paste the key in the **License Key** field.

Now you can obtain updates during the 30-day trial period.

Registering The Trial Version Using A Commercial Key

After you have evaluated the trial version, you can register it again using a commercial license key. To get a commercial license key, you will need to purchase the Bitrix Site Manager license, enter the key in the **License key** field (*Settings > System settings > Module settings > Kernel > Update system*) and click **Apply**. Then, you will have to activate the key as described in [Registering a Commercial Version](#). Upon successful registration, you can download source codes.

Chapter 8.

The Update System

The system updates, like the technical support, are available within a year after the moment of registration of the purchased license. If you want to access these services after that period, you will have to renew your license.

Attention! For each installation of Bitrix Site Manager, a special token is stored in the Bitrix clients database. When a project is moved to another location (server), the token is replaced once the system requests the Bitrix server for updates for the first time from the new location. Since then, you cannot update the system from the old location.

Your computer must be connected to the Internet to receive updates.

Updating via Proxy Server

Bitrix Site Manager has an option allowing you to set up receiving updates via the proxy server. The only thing you have to do is specify the proxy server parameters at the Kernel module settings page (*Settings > System settings > Module settings > Kernel > Update system*).

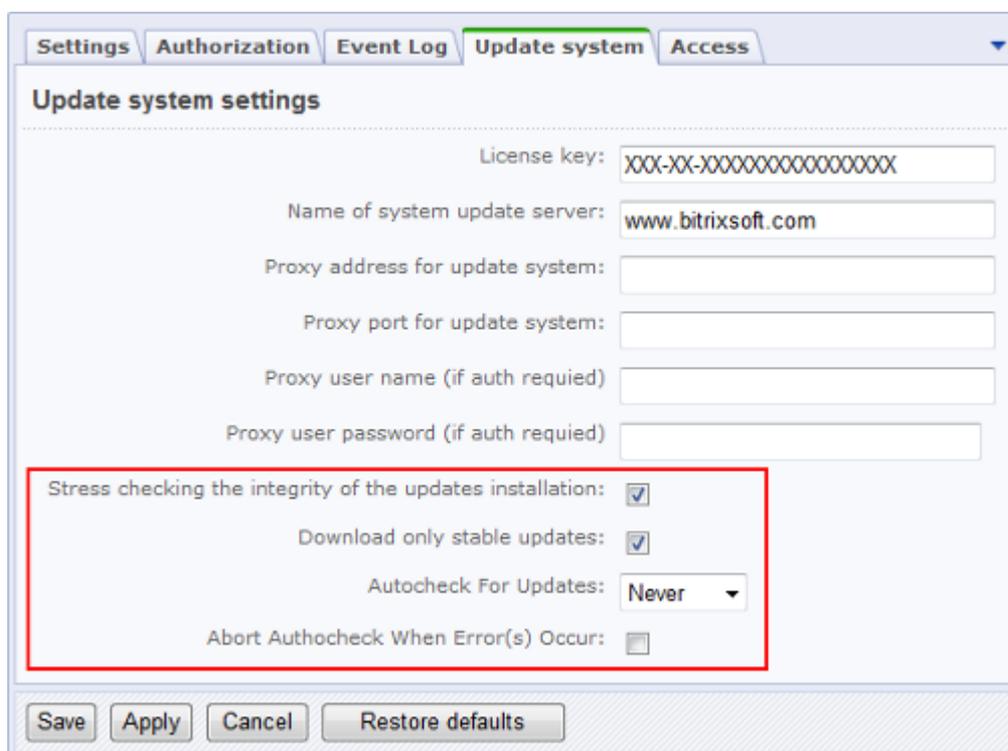


Fig. 8.1 Update system parameters

Note the following options.

- § **Stress check the integrity of updates.** Enabling this option makes copying the update files more safe. This function may slow down the update process but allows to get full information about each new file copied to your system.
- § **Download only stable updates.** Some new modules and/or updates are available at beta testing stage. Changing this option is equivalent to clicking the **Allow beta versions / Allow only stable versions** link at the **Settings > Update** page.
- § **Autocheck for updates.** You can completely disable autoupdate if required. However, it is not recommended.
- § **Abort autocheck when error(s) occur.** If checked, this option tells the update system to stop any current operation whenever it encounters any error.

Downloading Updates

To download updates, open the update system page by clicking the button  on the **Control Panel** toolbar.

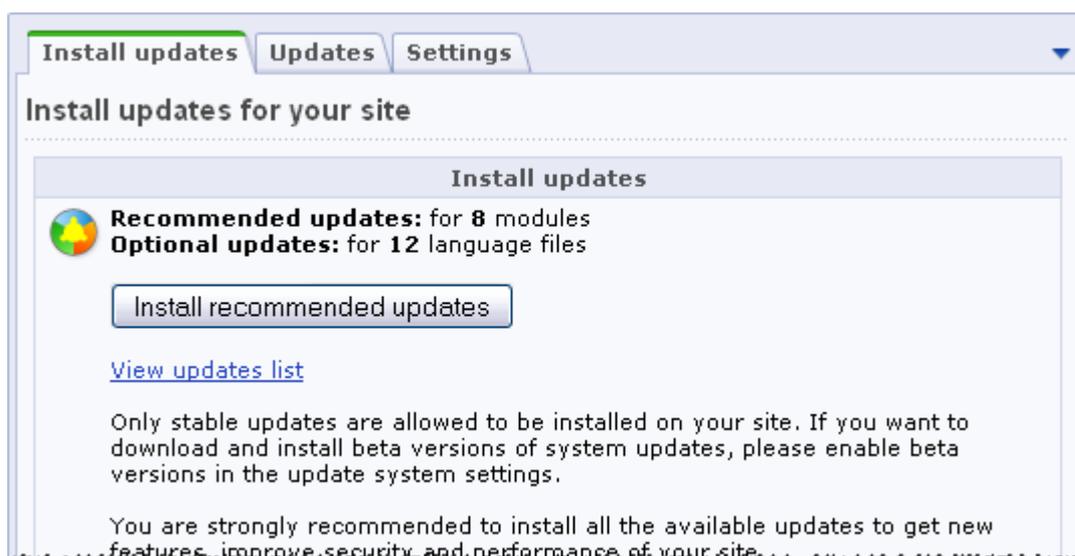


Fig. 8.2 Stepwise update form

q Click **Install Recommended Updates** to install all the updates listed here.

To install only the required updates, you can click the **Updates** tab and select the updates you want to install.

Important! If any dependency exists between the selected and/or unselected updates, you must choose all of them or none.

Downloading Interface language Files

You have an option to install additional user interface languages.

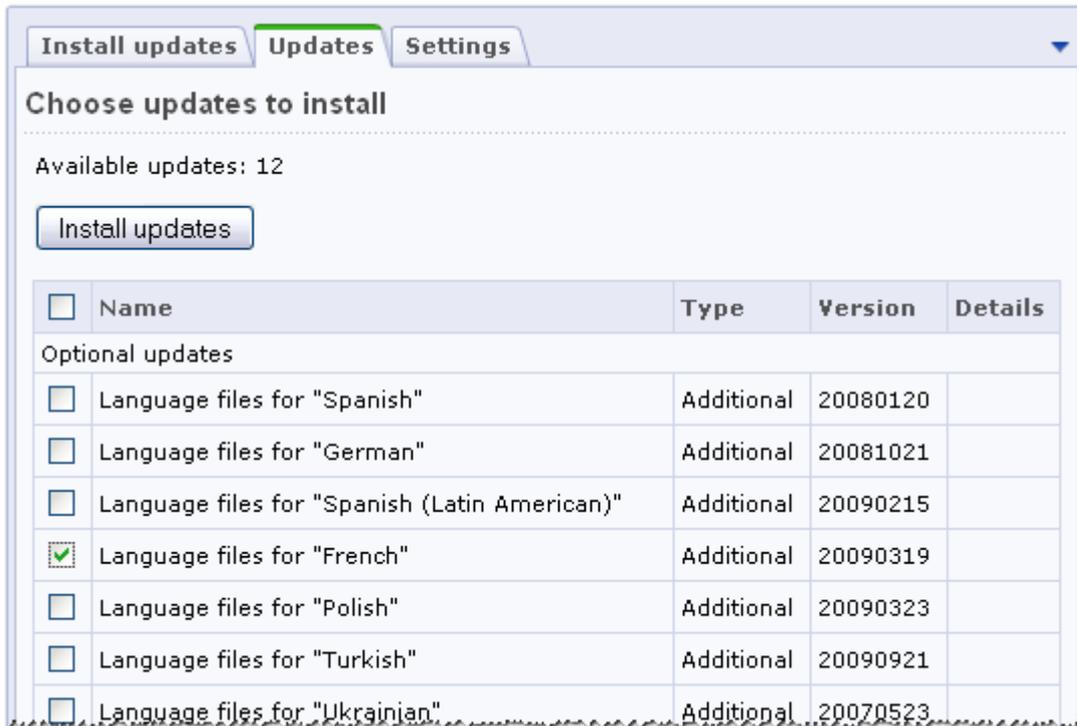


Fig. 8.3 The user interface language files

- q Click the **Updates** tab.
- q Select the required languages in the optional updates group.
- q Click **Install Updates**.

Downloading Source Codes

After you have registered your product copy and updated the system to the latest version, you can download the source codes. Click the **Download source code** link. The system will download the source codes from the Bitrix server.



Fig. 8.4 Downloading source codes

- q Click the **Download source code** button. The system will download the source codes from the Bitrix server.

Now you have the fully functional product copy with the open source codes.

Note! If you install the full, open source code version and enter a commercial license key, the source code download feature will not be available because all source codes are already in the distribution package.

Chapter 9.

Transferring The Site From A Local Machine To A Remote Server

In order to transfer a site from a remote server to a local machine, you can use the built-in backup creation tool. This function allows you to:

- § create an archive with all files of your site (in **tar.gz** format);
- § exclude the system kernel from the archive;
- § exclude files whose size exceeds the specified limit;
- § create the database dump (in **tar.gz** format);
- § exclude statistics and search index from the database dump.

You can create the backup copy of the site using the back-up creation form: *Control Panel -> Settings -> Tools -> Backup.*



Backup settings

Back up gradually:

Step: 30 sec, interval: 10 sec

Files

Back up public files:

Back up kernel files:

Do not include files which size exceeds (0 - no limit): 1048576 kB

Skip Symbolic Links to Directories:

Exclude Files and Folders (mask):

More...

Database

Back up database: (0.76 Mb)

Exclude from archive: statistics (0.12 Mb)

search index (0.28 Mb)

Back up Stop

Note that the update procedure changes the system kernel files and can alter the database structure. If the system kernel version does not match the database version, your site can fail to run.

Fig. 9.1 Backup creation form

The **Backup Gradually** option is recommended to be set because many hosting services restrict the script execution time. If the archive creation period lasts longer than the hosting time setting, the server will simply abort the script. The **Backup Gradually** option enables to create the archive in steps. You have to consult your hosting service support for the correct values of the **Step** and **Interval** parameters. If the value is unknown, it is best to use the provided defaults. You can ignore this parameter when archiving the local system.

Select the archival objects in the **Files** group. Note that you can omit adding the kernel files only if the local and remote system versions are absolutely identical.

Use the file size restriction field to exclude unwanted large files from the archive. Furthermore, you can exclude any files of your choice by specifying the filepath wildcard mask.

The size of the database archive can also be decreased by omitting the statistics and the search index.

- q Having specified the archive parameters, click **Backup** to start the archive creation process.

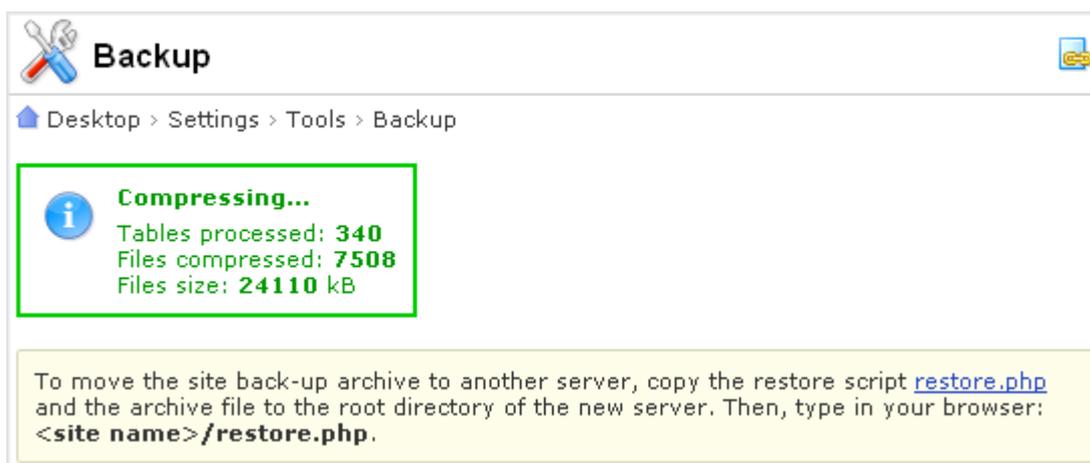


Fig. 9.2 Archive creation process

After the archive file has been created, the file link will show under the form and will become available for download.

- q Click on the action menu icon and select **Download** in the menu.

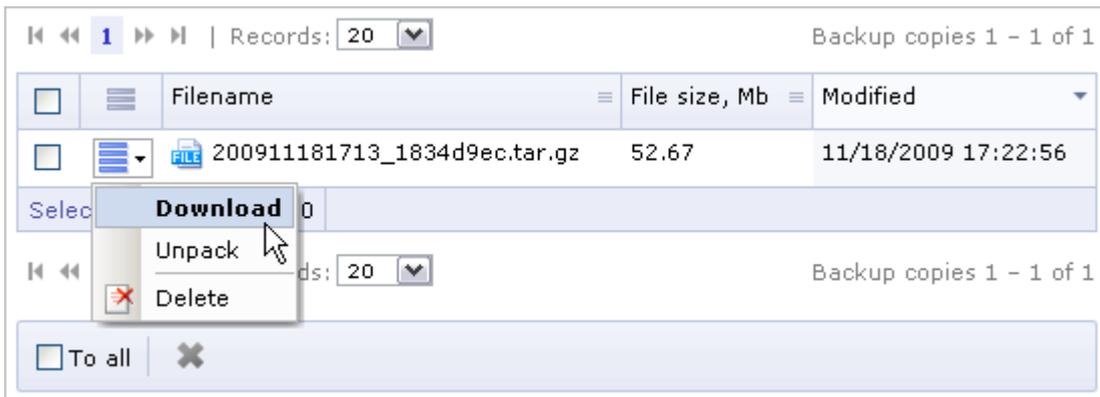


Fig. 9.3 Downloading the backup file

- q Upload the downloaded file to the root directory of your server.
- q Download the script **restore.php** the link to which is available at the page top. Then, upload the script to the root directory of your server.
- q Open **http://<your_site>/restore.php** in your web browser.
- q Follow the wizard instructions to unpack the archive.

After the archive has been unpacked, be sure to delete the following files from your server:

- \$ **/restore.php;**
- \$ **/archive_file** (a.tar.gz file);
- \$ **/bitrix/backup/database_dump** (a .sql file).

Chapter 10.

Uninstalling Bitrix Site Manager

You can uninstall the Bitrix Site Manager by selecting one of the commands:

§ *Menu Start -> Settings -> Control panel -> Add Remove Programs*

or

§ *Menu Start -> Programs -> Bitrix Web Environment -> Uninstall.*

Removing Bitrix Site Manager from a local machine deletes the database files as well as all files and folders from the root folder of your web server.

Check that **.../www** folder was removed from the Bitrix Environment folder as well.

Chapter 11.

Additional Information

Web Server Configuration

By default, the Bitrix Web Environment web server sits at the port **6448**. However, you can change it to any other value on the stipulation that the new port is not in use by other applications (e.g. IIS).

The virtual web server settings can be changed by editing the file **bx_dir.conf**, which can be found in **\Program Files\Bitrix Environment\apache\conf**.

```
DocumentRoot "C:\Program Files\Bitrix Environment\www"  
ServerRoot "C:\Program Files\Bitrix Environment\Apache"  
Listen 6449
```

Zend Optimizer Verification

To ensure that **Zend Optimizer** is installed on the server and obtain its configuration, do the following.

7. Create a file **test.php**. Type the following directive in it:

```
<?phpinfo();?>
```

8. Save the file in the root folder of the site.
9. Open the file in your browser: <http://localhost/test.php>.
10. The browser will display a table similar to the following:

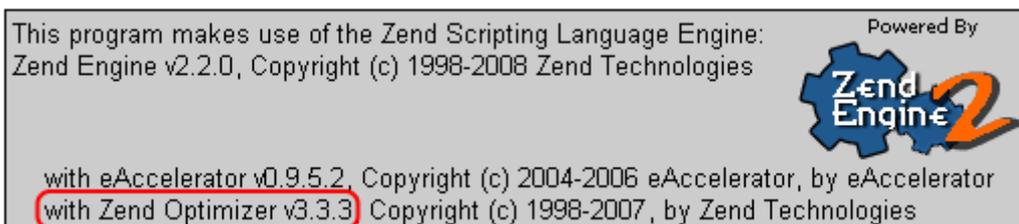


Fig. 11.1. Zend Optimizer verification result

A text framed in red border tells that **Zend Optimizer** is installed.

Zend Optimizer	
Optimization Pass 1	enabled
Optimization Pass 2	enabled
Optimization Pass 3	enabled
Optimization Pass 4	enabled
Optimization Pass 9	disabled
Zend Loader	enabled
License Path	no value
Obfuscation level	3

Fig. 11.2 Current settings of Zend Optimizer installed at a server

Note! For undisturbed operation, Bitrix Site Manager requires that Zend Optimizer version 2.6.x or higher is installed.

Web Server Configuration File: .htaccess

This section describes how to configure Apache web server using the file **.htaccess**.

In most cases, a user cannot access the server configuration file (**httpd.conf**) because its scope affects all users. However, you can edit the **.htaccess** file to make configuration changes which will affect your site only.

The server configuration file **httpd.conf** must have a directive allowing to use **.htaccess** files. Otherwise, the system will ignore these files. Consult your techsupport about this feature.

The **.htaccess** file contains directives which scope is constrained to the directory in which it resides as well as all subdirectories. The **.htaccess** file in the server root directory affects all the server except directories having their own **.htaccess** file. The **.htaccess** directives are applied in the same order as they are specified. Hence, **.htaccess** directives in the given directory have higher priority than those of the parent directories.

You do not need to restart server after you have modified **.htaccess**. This file is re-read each time the server is queried, that's why changes take effect right away. As it is a system file, it cannot be accessed by users from their browser.

Generally, the **.htaccess** syntax is similar to that of the main configuration file. However, the file power may be limited by the **AllowOverride** directive. It defines which types of the **.htaccess** directives can override those of the preceding directives.

Note! During installation, the setup wizard verifies whether **.htaccess** files can be used.

A **.htaccess** file created during the installation has the following default directives.

```
Options -Indexes
ErrorDocument 404 /404.php
```

```
#php_flag allow_call_time_pass_reference 1
#php_flag session.use_trans_sid off
#php_value display_errors 1
#php_value mbstring.func_overload 2
#php_value mbstring.internal_encoding UTF-8
<IfModule mod_rewrite.c>
    RewriteEngine On
    RewriteCond %{REQUEST_FILENAME} !-f
    RewriteCond %{REQUEST_FILENAME} !-l
    RewriteCond %{REQUEST_FILENAME} !-d
    RewriteCond %{REQUEST_FILENAME} !/bitrix/urlrewrite.php$
    RewriteRule ^(.*)$ /bitrix/urlrewrite.php [L]
</IfModule>
<IfModule mod_mime.c>
    AddType application/x-httpd-php .ico
</IfModule>
<IfModule mod_dir.c>
    DirectoryIndex index.php index.html
</IfModule>
<IfModule mod_expires.c>
    ExpiresActive on
    ExpiresByType image/jpeg "access plus 3 day"
    ExpiresByType image/gif "access plus 3 day"
</IfModule>
```

Warning! To activate the commented PHP directives, you have to remove the comment operator (#) at the beginning of each line. If your Apache server does not allow PHP flags, these directives will incur an internal server error (500). If this is the case, comment these directives back.

Other uncommented PHP directives are enclosed in the verification condition statements to check whether the required Apache modules are present in the system. These directives will never cause server errors.

- § The PHP directive **php_flag session.use_trans_sid off** disables the session ID substitution in the site URLs.
- § If the PHP flag **php_value display_errors** is set to **1**, the error messages are enabled and displayed. The directive **php_value error_reporting** defines which level of PHP interpreter errors is displayed.
- § The **php_value mbstring.func_overload 2** and **php_value mbstring.internal_encoding UTF-8** directives configure the mbstring library.
- § **IfModule mod_rewrite.c** configures **mod_rewrite** parameters.
- § The **AddType application/x-httpd-php .ico** directive instructs to handle **ico** files as PHP files.
- § The directive **ExpiresActive on** enables image caching which boosts download speed on recurring queries.
- § **ExpiresByType image/jpeg "access plus 3 day"** and **ExpiresByType image/gif "access plus 3 day"** define the cached image format and the caching period. By default, **.jpeg** and **.gif** files are cached for 3 days.

Note! The `.htaccess` file must be saved in the UNIX format (for example: **Save as UNIX text** option in the **FAR** manager editor).

Creating and Unpacking tar.gz Archives

5. Creating an archive

§ Method 1

```
tar -zvcf <dirname>.tar.gz <dirname>/
```

§ Method 2

```
tar -c dirname|gzip -c - > dirname.tar.gz
```

6. Unpacking an archive

§ Method 1

```
tar zxvf file_name.tar.gz
```

§ Method 2

```
gunzip file_name.tar.gz  
tar xf file_name
```

Requisite Access Rights At Server

You (or your hosting service) can configure access permissions on the remote server as desired, but in the end the scripts should be able to access files for both reading and writing, which means that a primary “user” under which the Apache server runs, must be able to access files with these modes. At the same time, if a shared hosting is the case, other users must not be able to read or write in your files via their scripts. Your “user” should be able to rewrite files via the FTP as well as modify uploaded files from within scripts.

The problem is that each hosting provider has their own security policy and preferences: while some limit access to other's files even with a 777 permissions, some run the Apache web-server under a single user for each virtual host.

Some hosting providers launch the server process under user *nobody:group* by default. The files that a hosting client stores on a server should be accessible by Apache. It means that they have the attribute *read for all* set, or a user (file owner) and server must belong to the same group. In the latter case, files must be accessible by the group members for reading (FTP servers assign this kind of permission).

This approach hits hard the security because if all users belong to the same group, they can read each other's files. Say, a user opens a page that runs a CGI script. Since the script is in fact executed by the Apache server that runs under a *nobody* user, the script will run with permissions assigned to this user.

At the same time, a script can write files to a hosting server directory if only a directory has a *write* attribute set for a user (or a user group). It is obvious that this approach allows each user modify other users' files, which is impermissible.

Bitrix Site Manager remains fully functional with any access permission that you have specified at the installation time.

To enable Bitrix Site Manager work correctly with your CHMOD, you have to set the following constants in **/bitrix/php_interface/dbconn.php**:

```
define("BX_FILE_PERMISSIONS", 0644);  
define("BX_DIR_PERMISSIONS", 0755);
```

Substitute 0777 with values allowed by your hosting for files and folders.

The following values are common to most hostings:

- § **0644** – for files,
- § **0755** – for folders.

You can set the access permission level manually by using CHMOD in console.

The following command sets the access permission level for both files and folders:

```
chmod -R 644 *
```

You can use the following command to set rights for folders only:

```
find . -type d -exec chmod 0777 {} ';' 
```

Some FTP clients allows to recursively set rights for files and folders. For example: FlashFXP version 3.xx. FlashFXP allows separate rights for files and folders; however, this mode is a bit slower.

You should consider the following settings:

- § Separately set File and Folder attributes;
- § Apply changes to all subfolders and files.

Individual access permission levels are applied to these settings:

- § Folder permissions:

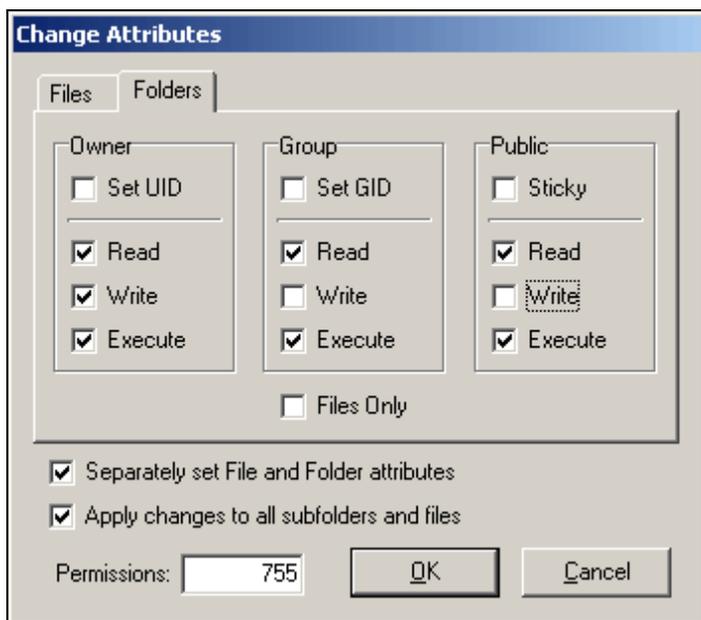


Fig. 11.3 Folder permissions in FlashFXP

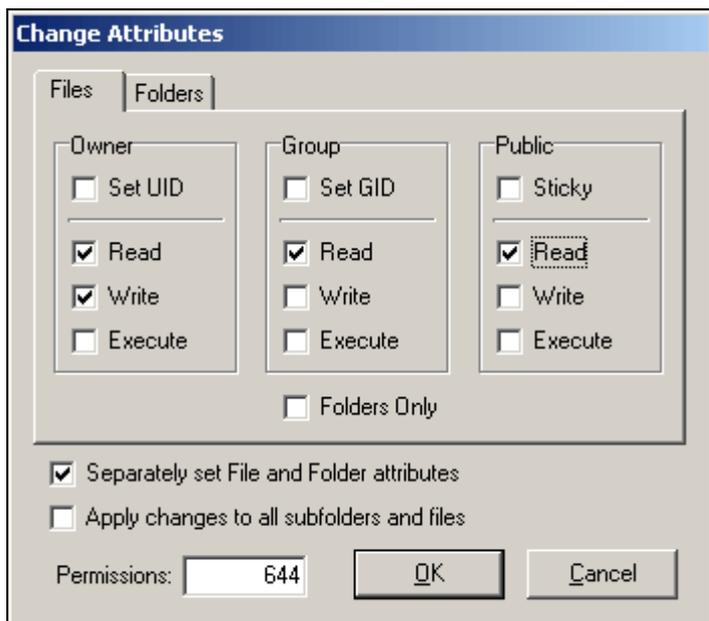


Fig. 11.4 File permissions in FlashFXP

Note! Site Explorer allows to view the system-level attributes of files and folders.

<input type="checkbox"/>		Name	Size	Modified	Type	Access permissions	Product access permissions
<input type="checkbox"/>		About Us		05/29/2007 16:59:17	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Blogs		05/29/2007 16:59:18	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Site Map		05/29/2007 16:59:18	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Company News		06/06/2007 14:11:32	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Search		05/29/2007 16:59:18	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Support		05/29/2007 16:59:19	Folder	drwxrwxrwx	Full access
<input type="checkbox"/>		Menu type «top»	481	05/29/2007 14:36:48	PHP script	-rw-rw-rw-	Full access
<input type="checkbox"/>		404 - HTTP not found	612	05/29/2007 14:36:48	PHP script	-rw-rw-rw-	Full access
<input type="checkbox"/>		Company News	1654	06/06/2007 14:12:05	PHP script	-rw-rw-rw-	Full access
<input type="checkbox"/>		RSS import	496	06/06/2007 16:20:08	PHP script	-rw-rw-rw-	Full access
Selected: 10		Checked: 0					

Fig. 11.5 File and folder permissions in Site Explorer

Site Explorer displays the file and folder attributes as well as the owner and user group information (for xNIX operating systems) in the **Access permissions** column.

Troubleshooting Typical Installation Errors

Problem

MySQL Query Error: ... [Out of memory; restart server and try again (needed 65528 bytes)]

Solution

Increase memory limit in the MySQL settings.

The recommended parameters to be specified in the MySQL configuration file (**my.cnf**) include the following:

```
key_buffer = 128K
max_allowed_packet = 16M
table_cache = 4
sort_buffer_size = 128K
read_buffer_size = 128K
read_rnd_buffer_size = 128K
net_buffer_length = 128K
thread_stack = 128K
```

You will have to restart MySQL after saving changes.

Possible Zend Optimizer Issues

Problem

The following output is displayed after the site is transferred to a remote hosting:

```
Zend 2002062301116956658хщ џ2 ГZiobIF sE*ЎШ ".] tq†F$Ц Й bKI Ш-Ў(мЪ `e%rШJЎBR©УГ Оэ:6ьgtmЪ Y:тй YefKQ
пН-уwdlt» ЮOWNO>сЯ с-Ыnpв>Ък{?Ючсч††ћЪ7M¶©к-Т†,,Фгелциър
```

Solution

Zend Optimizer is not installed. You should call your hosting techsupport service to solve this problem, or install it by yourself if possible.

After Zend Optimizer is installed, the corresponding notice will be displayed in the phpinfo() function report.

We recommend to use Zend Optimizer version 3.3.0 or higher.

Only the trial version requires Zend Optimizer. The commercial version is shipped with full open source code and does not require it.

Problem

The following error is displayed:

```
Fatal error: Unable to read 63841 bytes in /disk2/clients/a1922/site.ru/htdocs/bitrix/modules/main/tools.php on line 0
```

Solution

This error arises when running the encoded trial version. Files have been obviously transferred via the FTP in text mode. Files encoded with Zend Optimizer are binary so you have to ensure you transfer files in binary mode.

Final Notes

This manual describes nearly all steps required to install Bitrix Site Manager and Bitrix Web Environment. We have done our best to cover as many installation options and choices you may encounter.

If you still have any questions regarding installation, leave them at the Bitrix forum:

<http://www.bitrixsoft.com/support/forum/>

Alternatively, consult the techsupport service directly:

http://www.bitrixsoft.com/support/ticket_list.php