

Novi Survey Installation & Upgrade Guide

Introduction

This procedure documents the step to create a new install of Novi Survey and to upgrade an existing install of Novi Survey.

By installing or upgrading the software you agree to all the terms and conditions specified in the Novi Survey license agreement. The license agreement is available as file `NoviSurvey Software License.html` in the `documentation` folder of the distribution of the software.

To install Novi Survey in a web farm or a web garden, see Appendix A (page 5). To move an existing install of Novi Survey to another server, see Appendix B (page 7). To upgrade an existing install of Novi Survey, refer to page 4.

Prerequisites

- Windows 2003 or 2008 server with all important updates applied; Vista or win7 computer is fine for a development or test deployment.
- IIS 6.0 or 7.0
- IIS configured to run ASP.NET applications and to serve static content
- .NET framework [3.5 SP1](#) installed
- Session state enabled in IIS (session state is enabled by default)
- Either of the following databases
 - MS SQL Server 2005, 2008 or [express](#) (Express version is available freely); Database server should be setup to allow for Mixed Mode authentication. If using, the express version, the TCP/IP network protocol should be enabled (the protocol is disabled by default for the express version). The network protocol can be enabled using the Sql Server Configuration Manager.
 - Oracle 11g (standard, enterprise or freely available [express](#) edition)
- If the server for the database is distinct from the web server, then communication should be allowed between the 2 servers for the ports and protocols required by the database. Hardware and software firewalls between the 2 servers should be adjusted to allow for this communication.
- STMP server for sending emails
- If Novi Survey is deployed in a hosted environment, the hosted account must allow modification to the database.
- The user for the IIS process (usually: NT AUTHORITY\NETWORK SERVICE) has read/write access to the temp windows directory (usually: `c:\windows\temp`) and to the temporary ASP.NET directory(ies) (`c:\windows\Microsoft.NET\Framework\v2.0.50727\Temporary`

ASP.NET Files and for 64-bit servers

c:\windows\Microsoft.NET\Framework64\v2.0.50727\Temporary ASP.NET Files)

- Network firewall, if any, must be configured to allow loopback traffic from the public WAN address for the application (i.e., the web server running the application must be able to access resources in the application using the public deployment URL for the application).

Installation process – use for initial install

1. Unzip the archive for the release
2. Grant Full Control privileges to group Users (or group Everyone) to the physical directory IIS distribution\NoviSurvey under the root of the release.
3. Create a database for the application:
 - SQL Server:
 - create a database NoviSurvey.
 - Create a local SQL Server login 'NoviSurvey'. Set the password for the login to never expire. Note that creating a domain login will not work.
 - In the User mapping for login NoviSurvey, grant role db_owner to database NoviSurvey.

Note that with the exception of using the database creation, system configuration, and upgrade functions the application will function if the database privileges for the database user are db_datareader and db_datawriter. The db_owner privilege is required only for the initial setup of the system, when the system configuration is changed, and when the system is upgraded.
- Oracle:
 - create a schema NoviSurvey.
 - Grant roles CONNECT and RESOURCE to the schema.
4. If Novi Survey is deployed in a web farm or a web garden, see Appendix A.
5. Create a new NoviSurvey application pool. The application pool should be created with options:
 - .NET Framework: v2.0
 - Managed pipeline mode: Integrated

Under section Process Model for the pool, set the property Identity to NetworkService.

Under section Process Model, set property Load User Profile to true (IIS7 only).

Under section Recycling, set property Specific Times to a time of expected low usage (e.g., 2 AM).

6. In IIS, create an application (IIS7) or virtual directory (IIS6) named NoviSurvey and map the application/directory to the physical directory `IIS distribution\NoviSurvey` under the root of the release.

Assign the application pool created in the previous step to the virtual directory. Alternatively, the files under `IIS distribution\NoviSurvey` can be copied to the root of the web site in IIS. If the files are copied to the root of the web site in IIS, then group `Users` (or group `Everyone`) must have `Write` privileges to the directory.

When deploying the system as an application, set property `Physical Path Credentials to Application User` (pass-through authentication).

When the system is deployed as an application under an ASP.NET web site, certain settings in file `web.config` for the parent site can conflict and interfere with the settings in file `web.config` for Novi Survey. When the initial login or setup configuration (see below) cannot be completed and the system is deployed as an application under an ASP.NET web site, it is recommended to deploy the system in its own dedicated web site.

7. Point IE (v7 or greater) or Firefox (v3 or greater) to the application (e.g., <http://www.mydomainname.com/NoviSurvey>).

In the login page enter login:

- user name: admin
- password: admin2319

Upon login, the system will direct you to the system configuration page. **Refer to the online help for instructions on configuring Novi Survey (help page: System configuration).** You can access the online help by clicking on the help icon on the top right hand side of the application ribbon.

After the initial configuration is complete, you can log in as system administrator using user name "admin" and the password set in the system configuration. Additional documentation regarding the configuration of the system, including sample connection strings is available at: <https://novisurvey.net/Help/en/index.html?ConfigureApp>

Upgrade process – use for upgrade after an initial install

1. Place application offline by renaming file `App_Offline.htm.save` to `App_Offline.htm` under the root directory for the application (as set in step 0 of the initial install).
2. Copy all files and directories under directory `IIS distribution\NoviSurvey` for the upgrade.
3. Paste the files and directory in the directory containing the application (as set in the initial install). Select option to merge all directories and overwrite all files. **Files `App_Data\appSetting.config` and `App_Data\nsk.dmp` should not be overwritten.**
4. Delete file `App_Offline.htm` under the root directory for the application
5. Log in as system administrator using account `admin`. Note that only this account can perform the upgrade. Follow further upgrade step, if any, as instructed by the user interface for NoviSurvey.
6. Verify that system version in About box (available at the top right hand side of the application ribbon) is the same as the version for the release (the file name for the release includes the version number as a three part number).

Appendix A – Configuring NoviSurvey for use in a web farm or web garden

To deploy Novi Survey a web farm or a web garden, you should perform the installation as specified below. Note that you must have the multi-server option to deploy Novi Survey in a web farm or web garden environment.

1. Install the first node by following the standard installation procedure (see page 2).
2. To install all additional nodes in the web farm or web garden, follow steps for the standard installation procedure up to step 6 but before step 7 (create the web application in IIS but *do not try to access it from the browser*). Copy file `App_Data\nsk.dmp` from the initial install to the `App_Data` directory of the new node.
3. Adjust the system configuration. Open file `web.config` in directory `IIS distribution\NoviSurvey` under the root of the release. Locate element:

```
<sessionState timeout="15" cookieName="NoviSurveySessionCookie"
cookieless="AutoDetect"
/>
```

Modify the element to use an ASP.NET State Service (or other persistence store suitable for use with the session state):

```
<sessionState timeout="15" cookieName="NoviSurveySessionCookie" cookieless="AutoDetect"
mode="StateServer" stateConnectionString="tcpip=192.168.0.4:42424" />
```

Where attribute `stateConnectionString` references the computer where the ASP.NET State Service is running (192.168.0.4 in the example above). If NoviSurvey is installed in a web farm, all the nodes of the farm must reference the same ASP.NET State Service. If the ASP.NET State Service is not on the same computer as IIS (which will always be the case in a web farm, for at least one of the nodes), then the ASP.NET State Service must be configured to accept remote connections. To allow remote connection open registry key

```
HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\aspnet_state\Parameters
```

and change the value of `AllowRemoteConnection` to 1 instead of 0.

Note: an alternative to using the ASP.NET State Service or some other session data store is to use “sticky sessions”. Sticky sessions are set at the level of the load balancer for the web farm and result in all requests for a given session being processed by the same node in the farm. In this configuration, using In Process session state management is appropriate and will result in a greater overall performance of the farm. This is due to the elimination of the overhead involved with serialization/deserialization of the data in the session and the over-the-write data transfer from and to the application and the session state store.

4. Continue the standard installation procedure at step 7.

Appendix B – Moving a Novi Survey install to another server

To move an existing installation to a new server, you **should not** copy the files from the prior install to the new server. Instead, perform the following steps:

1/ Create a new install as documented for an initial install, skipping the database creation step. Do not configure the new install using the configuration page until you have performed step 2 below.

2/ If you do not have the multi-server option or you have as many install of Novi Survey as allowed by the option, deactivate the prior install. Deactivation of an install is performed in the system configuration page by pressing the “deactivate” button. If you have an older version of the software and do not see the “deactivate” button, contact Novi Systems support.

3/ Activate and configure the new install. You can connect the software to the database by entering the connection string corresponding to the database for the prior install or to a copy of the database for the prior install. The database must be for the **same** release as the software. The release for the software is available from the “about” box. The release for a database is obtained by running the following query:

```
select PROPERTYVALUE from APPLICATIONPROPERTY where PROPERTYKEY = 'release'
```

If the release for the database is lower than the release for the software, you can follow the upgrade procedure to ensure that the database and software components are compatible.

Appendix C – Configuration parameter file

Configuration information for Novi Survey is stored in file `~/App_Data/appSettings.config`. Most of the configuration parameters are managed directly through the system configuration page for the system (`~/s/ConfigureApp.aspx`). In some cases, it may be desirable to change some of the configuration parameters that cannot be modified from the system configuration page. These parameters are listed in the table below.

Important: any parameter in the file that is not listed in the table below should not be modified unless explicitly requested by Novi Systems support staff. **Failure to comply with this practice can result in a non-functional install of Novi Survey and induce corruption of user data.**

Parameter key	Value
DEFAULT_PERSON_FIELDS	<p>Defines the fields to show in the 'profile' page. Fields to include must be separated by character ' '. Fields <code>FirstName</code>, <code>LastName</code> and <code>Email</code> must be included. Other fields that may be included are:</p> <p><code>Email,</code> <code>JobTitle,</code> <code>Phone1,</code></p> <p><code>Country,</code> <code>Address1,</code> <code>Address2,</code> <code>City,</code> <code>State,</code> <code>ZipCode,</code></p> <p><code>Company,</code> <code>CompanyEin,</code> <code>CompanyAddress1,</code> <code>CompanyAddress2,</code> <code>CompanyCity,</code> <code>CompanyState,</code> <code>CompanyZipCode,</code> <code>Phone2,</code></p> <p><code>Department,</code> <code>Location,</code></p> <p><code>PersonId,</code> <code>EmployeeId,</code></p> <p><code>Custom1,</code> <code>Custom2,</code> <code>Custom3</code></p>

ENABLE_DEV_MODE	Specifies if the install should operate in development mode. This parameter should be set to 'False' for all production or test installs. Developers working with the source code for the system may want to set the value of the parameter to 'True'. When set to true a log console and an addition button for triggering postbacks is shown on the client (web browser).
INVITATION_MAILER_SLEEP_TIME_MIN	The number of minutes of inactivity (sleep time) between active cycles for the invitation mailer process.
INVITATION_MANUAL_SEND_INTERVAL_MIN	The minimum number of minutes between an invitation email sent manually (i.e., forced to be sent) from the invitation report and the prior email sent for the invitation.
INVITATION_MAX_COUNT	Maximum number of invitations that can be sent to a participant for an invitation group. The count includes the initial invitation. Changing the value for the parameter will affect the 'number of reminder' option in the invitation group screen.
INVITATIONS_MIN_INTERVAL	The minimum number of days between reminders emails sent for an invitation.
MAX_INITIAL_INVITATIONS_PER_DOMAIN	The maximum number of emails released by the invitation mailer for a given domain for an invitation group (e.g., gmail.com) when the invitation group is first processed.
MAX_PER_CYCLE_INVITATION_COUNT	The maximum number of invitation emails sent by the invitation mailer process per organization per active cycle.
MAX_RESPONSE_COUNT_TO_ITEMIZE	The maximum number of response that are shown in a report section element when the option 'itemize responses' is selected. Large values for this parameter can result in extremely long HTML pages for the report.
MAX_SIZE_DESIGN_IMAGE	The maximum file size in kB for images that can be uploaded in the authoring screens or as answers to questions (e.g., files for image presentation elements).
MAX_SIZE_FILE_UPLOAD	The maximum file size in kB that can be uploaded in the authoring screens or as

	answers to questions. The size applies only to file that are not images.
MAX_SUBSEQUENT_INVITATIONS_PER_DOMAIN	The maximum number of emails released by the invitation mailer for a given domain for an invitation group (e.g., gmail.com) after the invitation group is first processed. This threshold applies to an invitation group for all cycles of the invitation mailer that follow the cycle in which the invitation group is first processed.
PDF_GENERATION_TIMEOUT_MIN	The maximum time in minutes allowed for generation of a report as a PDF document.
REQUEST_EXECUTION_TIMEOUT	The maximum time in seconds for any web request (including calls to pages, static resources, and web services).
REQUESTION_MAX_LENGTH	The maximum length in kB for a request. The value of the parameter should be adjusted when large files must be loaded in the system.