VPass Server

Configuration guide

This document describes detailed configuration for the web application and the windows service of the VPass system.

14. 12. 2014

Table of Contents

VPass Web configuration 2
configSections 2
NHibernate configuration 3
connectionStrings 4
NhibernateHelper 5
PHF.Security 6
vpassServerBusinessConfigurationSection 7
appSettings 8
system.web 9
system.webServer 11
runtime 12
system.serviceModel 13
location 15
system.diagnostics 16
VPass server windows service 17
configSections 17
NHibernate configuration 17
connectionStrings 17
NhibernateHelper 17
startup 17
appSettings 17
system.serviceModel 18
Runtime 18
system.Web 18

VPass Web configuration

configSections

```
<configSections>
    <section name="hibernate-configuration"
type="NHibernate.Cfg.ConfigurationSectionHandler, NHibernate"/>
    <section name="NhibernateHelper"
type="PHF.NHibernateSupport.NhibernateHelperConfigurationSection,
PHF.NHibernateSupport"/>
    <section name="PHF.Security" type="PHF.Security.SecurityConfigurationSection,
PHF.Security"/>
    <section name="vpassServerBusinessConfigurationSection"
type="VPass.Server.Business.Configuration.VpassServerBusinessConfigurationSection,
VPass.Server.Business"/>
  </configSections>
```

Example of the needed configuration sections definition in the web.config file. For each section configuration please see specific chapters.

NHibernate configuration

Configuration of the NHibenate ORM component. For details please refer to the NHibernate documentation on http://nhforge.org .

connection.connection_string_name - this key in the configuration specfies the connection name to the VPass database. The connection name have to be the same as in the **connectionStrings** section.

connectionStrings

This section contains all the connection string used by the Vpass web application. For details please see Microsoft MSDN documentation. **For the NHibernate mapping the SQL account has to be used**.

Key	Value	Note
name	Default	Has to be the same name as in the NHibernate configuration.
connectionString		Connection to the VPass database. **Use SQL account only.**

```
<add name="Default" connectionString="Data Source=[server];Initial
Catalog=[databseName];user id=[sqlUserName]; password=[sqlUserPassword]"/>
```

NhibernateHelper

Custom section that has additional configuration values for the NHibernate ORM.

Key	Value	Note
sessionHandler	PHF.NHibernateSupport.Web.WebSessionHandler, PHF.NHibernateSupport.Web	Specifies the NHibernate session store.
assemblies		Collection of the assemblies that contains NHibernate mapped objects
add assembly	VPass.Server.Business	Record in the assemblies collection with the reference to the business assembly that contains mapped objects

```
<NhibernateHelper sessionHandler="PHF.NHibernateSupport.Web.WebSessionHandler,
PHF.NHibernateSupport.Web">
    <assemblies>
      <add assembly="VPass.Server.Business"/>
    </assemblies>
  </NhibernateHelper
```

PHF.Security

Custom section. Configures the security manger that stores the current User credentials.

Key	Value	Note
userManagerType	VPass.Server.Web.Support.WebUserManager, VPass.Server.Web	Fully qualified type of the manager.

```
<PHF.Security userManagerType="VPass.Server.Web.Support.WebUserManager,
VPass.Server.Web"/>
```

vpassServerBusinessConfigurationSection

Custom section. Specifies the VPass communication manager with the exhibit and the change log store type for the Vpass business object change log.

Key	Value	Note
exhibitCommunicationServiceFactoryType	VPass.Server.Web.Services. Client.ClientManagerFactory, VPass.Server.Web	Exhibit communication manager
changeLogStoreType	VPass.Server.Web.Support. WebChangeLogStore, VPass.Server.Web	Change log store type

```
<vpassServerBusinessConfigurationSection
exhibitCommunicationServiceFactoryType="VPass.Server.Web.Services.Client.ClientManager
Factory,VPass.Server.Web"

changeLogStoreType="VPass.Server.Web.Support.WebChangeLogStore, VPass.Server.Web"/>
```

appSettings

ASP.NET section. For details please refer to the MSDN description.

Key	Value	Note
ImageProvider-RootDirectory	~/Images	Specifies the directory for the user created images from VPass client.
VideoProvider-RootDirectory	~/videos	Specifies the directory for the user videos from the VPass client.

```
<appSettings>
    <add key="ImageProvider-RootDirectory" value="~/Images"/>
    <add key="VideoProvider-RootDirectory" value="~/videos"/>
  </appSettings>
```

system.web

ASP.NET section. For details please refer to the MSDN description. Should not be changed.

Registers the Report Viewer Components, Role and Membership providers, etc.

```
<system.web>
    <compilation debug="true" targetFramework="4.5">
      <assemblies>
        <add assembly="Microsoft.ReportViewer.WebForms, Version=11.0.0.0,
Culture=neutral, PublicKeyToken=89845DCD8080CC91"/>
        <add assembly="Microsoft.ReportViewer.Common, Version=11.0.0.0,
Culture=neutral, PublicKeyToken=89845DCD8080CC91"/>
        <add assembly="Microsoft.Build.Framework, Version=4.0.0.0, Culture=neutral,
PublicKeyToken=B03F5F7F11D50A3A"/>
      </assemblies>
      <buildProviders>
        <add extension=".rdlc" type="Microsoft.Reporting.RdlBuildProvider,
Microsoft.ReportViewer.WebForms, Version=11.0.0.0, Culture=neutral,
PublicKeyToken=b03f5f7f11d50a3a" />
      </buildProviders>
    </compilation>
    <globalization culture="cs-CZ" enableClientBasedCulture="false"/>
    <httpRuntime targetFramework="4.5" maxRequestLength="2000000000"/>
    <customErrors mode="Off"></customErrors>
    <authentication mode="Forms">
      <forms loginUrl="~/Login.aspx" timeout="2880" defaultUrl="~/"/>
    </authentication>
    <authorization>
      <deny users="?"/>
      <allow users="*"/>
    </authorization>
    <membership defaultProvider="DefaultMembershipProvider">
      <providers>
        <add name="DefaultMembershipProvider"
type="VPass.Server.Web.Support.MembershipProvider, VPass.Server.Web"
enablePasswordRetrieval="false"
             enablePasswordReset="false" applicationName="vpass"
passwordStrengthRegularExpression=""/>
      </providers>
    </membership>
    <roleManager defaultProvider="DefaultRoleProvider" createPersistentCookie="false"
cacheRolesInCookie="false" enabled="true">
      <providers>
        <clear/>
        <add name="DefaultRoleProvider"
type="VPass.Server.Web.Support.WebRoleProvider, VPass.Server.Web"
applicationName="vpass"/>
      </providers>
    </roleManager>
    <profile enabled="false">
      <providers>
        <clear/>
      </providers>
    </profile>
    <siteMap defaultProvider="Web">
      <providers>
        <add name="Web" securityTrimmingEnabled="true" siteMapFile="~/Web.sitemap"
type="VPass.Server.Web.Support.FormsXmlSiteMapProvider, VPass.Server.Web"/>
      </providers>
    </siteMap>
    <pages theme="VPass">
```

```
      <controls>
        <add tagPrefix="phf" namespace="PHF.Web.Controls" assembly="PHF.Web"/>
        <add tagPrefix="telerik" namespace="Telerik.Web.UI"
assembly="Telerik.Web.UI"/>
      </controls>
    </pages>
    <httpModules>
      <remove name="NHibernateHttpModule"/>
      <add name="NHibernateHttpModule"
type="PHF.NHibernateSupport.Web.AspNHibernateSqlLoginModule,
PHF.NHibernateSupport.Web"/>
    </httpModules>
    <httpHandlers>
      <add path="Telerik.Web.UI.WebResource.axd" verb="*"
type="Telerik.Web.UI.WebResource, Telerik.Web.UI"/>
      <add verb="*" path="Reserved.ReportViewerWebControl.axd"
type="Microsoft.Reporting.WebForms.HttpHandler, Microsoft.ReportViewer.WebForms,
Version=11.0.0.0, Culture=neutral, PublicKeyToken=89845dcd8080cc91"   />
    </httpHandlers>
  </system.web>
```

Pages

- Specifies the theme of the application
- Specifies the custom controls registration

httpModules

- Have to contain the **NHibernateHttpModule** registration as this is required for the proper function of the VPass.

httpHandlers

- Have to contain the **Telerik** handler and **Report viewer** handler. Fro details please refer to the MSDN or Telerik documentation

system.webServer

ASP.NET section. For details please refer to the MSDN description. Should not be changed.

```
<system.webServer>
    <modules>
      <add name="NHibernateHttpModule" preCondition="managedHandler"
type="PHF.NHibernateSupport.Web.AspNHibernateSqlLoginModule,
PHF.NHibernateSupport.Web"/>
    </modules>
    <handlers>
      <add name="ReportViewerWebControlHandler" preCondition="integratedMode" verb="*"
path="Reserved.ReportViewerWebControl.axd"
type="Microsoft.Reporting.WebForms.HttpHandler, Microsoft.ReportViewer.WebForms,
Version=11.0.0.0, Culture=neutral, PublicKeyToken=89845dcd8080cc91" />
      <add name="Telerik_Web_UI_WebResource_axd" path="Telerik.Web.UI.WebResource.axd"
type="Telerik.Web.UI.WebResource" verb="*" preCondition="integratedMode"/>
    </handlers>
    <validation validateIntegratedModeConfiguration="false"/>
    <security>
      <requestFiltering>
        <requestLimits maxAllowedContentLength="2147483648" />
      </requestFiltering>
    </security>
  </system.webServer>
```

modules

- Have to contain the **NHibernateHttpModule** registration as this is required for the proper function of the VPass.

handlers

- Have to contain the Telerik handler and Report viewer handler. Fro details please refer to the MSDN or Telerik documentation

runtime

ASP.NET section. For details please refer to the MSDN description. Should not be changed.

```
<runtime>
    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentity name="NHibernate" publicKeyToken="aa95f207798dfdb4"
culture="neutral"/>
        <bindingRedirect oldVersion="0.0.0.0-3.3.1.4000" newVersion="3.3.1.4000"/>
      </dependentAssembly>
    </assemblyBinding>
  </runtime>
```

system.serviceModel

ASP.NET section. For details please refer to the MSDN description of the WCF configuration. Should not be changed.

This section contains configuration for the communication with the VPass client via the WCF.

Endpoints and Services section can be changed but requires very careful testing and changes in the VPass clients configuration and depending on the change, the change of the exhibitCommunicationServiceFactoryType to create different manager for other connection type than HTTP.

Behaviors and binding can be changed to configure existing services and endpoints to configure the existing services as needed. For details please refere to the WCF documentations in the MSDN.

```
<system.serviceModel>
    <bindings>
      <basicHttpBinding>
        <binding name="" maxBufferPoolSize="2147483647" maxBufferSize="2147483647"
          maxReceivedMessageSize="2147483647" messageEncoding="Text">
          <readerQuotas maxDepth="2000000" maxStringContentLength="2147483647"
            maxArrayLength="2147483647" maxBytesPerRead="2147483647"
maxNameTableCharCount="2147483647" />
        </binding>
        <binding name="BasicHttpBinding_ICMSService" maxBufferPoolSize="2147483647"
          maxBufferSize="2147483647" maxReceivedMessageSize="2147483647"
          messageEncoding="Text">
          <readerQuotas maxDepth="2000000" maxStringContentLength="2147483647"
            maxArrayLength="2147483647" maxBytesPerRead="2147483647"
maxNameTableCharCount="2147483647" />
        </binding>
        <binding name="BasicHttpBinding_ISystemService" />
      </basicHttpBinding>
      <netTcpBinding>
        <binding name="NewBinding0" receiveTimeout="01:20:00" sendTimeout="00:20:00"
          transactionFlow="false" maxReceivedMessageSize="200000000000" />
      </netTcpBinding>
    </bindings>
    <client>
      <endpoint
address="http://localhost:8733/Design_Time_Addresses/VPass.Client.Core.ServerCommunica
tion.Services/SystemService/"
        binding="basicHttpBinding" bindingConfiguration="BasicHttpBinding_ICMSService"
        contract="ClientSystemService.ISystemService"
name="BasicHttpBinding_ICMSService" />
      <endpoint
address="http://localhost:8733/Design_Time_Addresses/VPass.Client.Core.ServerCommunica
tion.Services/SystemService/"
        binding="basicHttpBinding"
bindingConfiguration="BasicHttpBinding_ISystemService"
        contract="ClientSystemService.ISystemService"
name="BasicHttpBinding_ISystemService" />
    </client>
    <behaviors>
      <serviceBehaviors>
        <behavior name="">
          <serviceMetadata httpGetEnabled="true" httpsGetEnabled="true"/>
          <serviceDebug includeExceptionDetailInFaults="true"/>
        </behavior>
        <behavior name="debug">
```

```
          <serviceDebug includeExceptionDetailInFaults="true" />
        </behavior>
      </serviceBehaviors>
    </behaviors>
    <serviceHostingEnvironment aspNetCompatibilityEnabled="true"
multipleSiteBindingsEnabled="true"/>
    <services>

      <service name="VPass.Server.Web.Services.IClientSystemService"
behaviorConfiguration="debug">
        <endpoint address="http://vpass.local/services/clientsystemservice.svc"
          binding="basicHttpBinding"
bindingConfiguration="BasicHttpBinding_ISystemService"
          name="HttpSystemService"
contract="VPass.Server.Web.Services.IClientSystemService" />
      </service>
      <service name="VPass.Server.Web.Services.ICMSEditorService"
behaviorConfiguration="debug">
        <endpoint address="http://vpass.local/services/CMSEditorService.svc"
          binding="basicHttpBinding"
bindingConfiguration="BasicHttpBinding_ICMSService"
          name="HttpSystemService"
contract="VPass.Server.Web.Services.ICMSEditorService" />
      </service>
      <service name="VPass.Server.Web.Services.IVisitorService"
behaviorConfiguration="debug">
        <endpoint address=""
          binding="basicHttpBinding" bindingConfiguration=""
          name="HttpVisitorService"
contract="VPass.Server.Web.Services.IVisitorService" />
      </service>
    </services>
  </system.serviceModel>
```

location

ASP.NET section. For details please refer to the MSDN documentation. Should not be changed.

This section specifies the security for specific pages inside the VPass web application.

```
<location path="cmseditor">
  <system.web>
    <authorization>
      <allow users="*"/>
    </authorization>
  </system.web>
</location>
<location path="pages/users/userlist.aspx">
  <system.web>
    <authorization>
      <allow roles="Admin"/>
    </authorization>
  </system.web>
</location>
<location path="videos">
  <system.web>
    <authorization>
      <allow users="*"/>
    </authorization>
  </system.web>
</location>
<location path="services">
  <system.web>
    <authorization>
      <allow users="*"/>
    </authorization>
  </system.web>
</location>
```

system.diagnostics

ASP.NET section. For details please refer to the MSDN documentation. This section can be erased or changed as is needed.

Section defines the logging output for the web application.

```
<system.diagnostics>
    <sharedListeners>
      <add name="myListener" type="System.Diagnostics.TextWriterTraceListener"
initializeData="TextWriterOutput.log" />
    </sharedListeners>
    <trace autoflush="true" indentsize="4">
      <listeners>
        <add name="myListener" />
      </listeners>
    </trace>
  </system.diagnostics>
```

VPass server windows service

The service uses some same components as the Web application with some minor differences that are required based on the context the code is running.

configSections

Registers fewer section than web – only sections needed for the NHibernate configuration.

```
<configSections>
    <section name="hibernate-configuration"
type="NHibernate.Cfg.ConfigurationSectionHandler, NHibernate" />
    <section name="NhibernateHelper"
type="PHF.NHibernateSupport.NhibernateHelperConfigurationSection,
PHF.NHibernateSupport" />
  </configSections>
```

NHibernate configuration

This section should be same as in the web application.

connectionStrings

Have to contain the same connection string as in the web application. E.g. pointing to the same database.

NhibernateHelper

Same configuration as in the web application. Only for the session handler use value **"PHF.NHibernateSupport.StaticSessionHandler, PHF.NHibernateSupport"**

startup

Standard section**. Do not change**.

Example:

```
<startup>
    <supportedRuntime version="v4.0" sku=".NETFramework,Version=v4.5" />
  </startup>
```

appSettings

Standard section. For details refer to the MSDN documentation.

Key	Value	Note
VideoDownloadJob-TargetDirectory	String, path	Has to point to same directory as is specified for the user saved videos in the web application.
UDPport	Int	
UrlToCall	String, url	
ClientSettingsProvider.ServiceUri	String	

system.serviceModel

Configuration of the communication with the client applications. **Do not change.** The endpoint is setup for stream transfer of the video files uploaded recorded on the clients.

Example:

```
<system.serviceModel>
    <bindings>
      <basicHttpBinding>
        <binding name="HttpStreaming_IMultimediaDownloadService"
transferMode="Streamed" maxReceivedMessageSize="20000000000" />
      </basicHttpBinding>
    </bindings>
    <client>
      <endpoint address="http://localhost/vpasclient/MultimediaDownloadService.svc"
binding="basicHttpBinding"
bindingConfiguration="HttpStreaming_IMultimediaDownloadService"
contract="MultimediaDownloadService.IMultimediaDownloadService"
name="HttpStreaming_IMultimediaDownloadService" />
    </client>
  </system.serviceModel>
```

Runtime

Standard section. Do not change.

Example:

```
<runtime>
    <assemblyBinding xmlns="urn:schemas-microsoft-com:asm.v1">
      <dependentAssembly>
        <assemblyIdentity name="NHibernate" publicKeyToken="aa95f207798dfdb4"
culture="neutral" />
        <bindingRedirect oldVersion="0.0.0.0-3.3.1.4000" newVersion="3.3.1.4000" />
      </dependentAssembly>
    </assemblyBinding>
  </runtime>
```

system.Web

Standard section. **Do not change**.

Example:

```
<system.web>
    <membership defaultProvider="ClientAuthenticationMembershipProvider">
      <providers>
        <add name="ClientAuthenticationMembershipProvider"
type="System.Web.ClientServices.Providers.ClientFormsAuthenticationMembershipProvider,
System.Web.Extensions, Version=4.0.0.0, Culture=neutral,
PublicKeyToken=31bf3856ad364e35" serviceUri="" />
      </providers>
    </membership>
    <roleManager defaultProvider="ClientRoleProvider" enabled="true">
      <providers>
        <add name="ClientRoleProvider"
type="System.Web.ClientServices.Providers.ClientRoleProvider, System.Web.Extensions,
Version=4.0.0.0, Culture=neutral, PublicKeyToken=31bf3856ad364e35" serviceUri=""
cacheTimeout="86400" />
      </providers>
```

```
    </roleManager>
  </system.web>
```