



Pitchflow – Software Installation

5/14/18

Contents

Infrastructure Installation	3
Overview	3
Recommended Hardware Requirements	4
System Requirements	4
Pitchflow Installation.....	5
Prerequisites.....	5
Web Servers	5
Installation	5
Configuration.....	5
Office Servers	8
Installation	8
Configuration.....	8
Post Installation.....	10
ADFS Servers.....	11
Logging	11
Troubleshooting	11
Post Installation Configuration	11
Appendix	13
Configuration Items.....	13
WebApi Configuration	13
Content Configuration	15
SAML Configuration.....	16
Seeder Configuration	17
Scheduler Configuration	17
Worker Configuration	18
Evalueserve Disclaimer	21

Infrastructure Installation

Overview

The following infrastructure units must be pre-installed before proceeding with Pitchflow's installations

- Apache Kafka server
 - Minimum
 - 1 server
 - Can be shared with ElasticSearch server
 - Recommendations
 - SSD
 - 3 servers for Apache Kafka replication
 - Apache Kafka configuration
 - 6 partitions per topic (2 partitions per 1 Office server)
 - 2 replicas
- MongoDB server
 - Minimum
 - 1 server
 - Recommendations
 - SSD
 - 3 servers for MongoDB replication
- ElasticSearch server
 - Minimum
 - 1 server
 - Can be shared with Apache Kafka
 - Recommendations
 - 3 servers for ElasticSearch replication
- Web/Redis server
 - 1 server minimum
 - Recommendations
 - 2 servers for performance improvement
 - Load Balancing
 - Should be installed on every Pitchflow's Web server (Frontend/WebApi/Content)
- Office server
 - 1 server minimum
 - Recommendations
 - 3 servers for proper handling of long-running PowerPoint actions
- FileStore (DFS)
 - 1 server minimum
 - Recommendations
 - 2 servers for replication
 - SSD recommended for high performance
 - Requires service account with read/write access

Recommended Hardware Requirements

Configuration					
Server Type	Software	OS	CPUs	Memory (GB)	Storage (GB)
Virtual	Elastic	Windows Server	2	8	160
Virtual	Mongo	Windows Server	2	8	160
Virtual	Kafka	Windows Server	2	8	160
Virtual	Web	Windows Server	4	8	160
Virtual	Office	Windows Server	4	16	160
Virtual	Office	Windows Server	4	16	160
Virtual	Office	Windows Server	4	16	160
Virtual	Storage	Windows Server	4	8	512

System Requirements

	Not Supported	Minimum Supported	Recommended
Host OS	Linux	Windows Server 2012	Windows Server 2016
Browser	Firefox, Opera,	IE 10, Safari	Google Chrome
Office	Older than Office 2007	Office 2007	Office 2016

Note: Internet Explorer 10+ is required on the end user's machine for the synch plug-in's single sign-on

Pitchflow Installation

Prerequisites

Pitchflow can be installed when all the infrastructure units are installed. If there are any security network restrictions between servers, standard service ports for installed infrastructure units should be opened (Kafka, MongoDB, Redis, ...).

Pitchflow requires SSL certificate for secure connections.

Web Servers

Installation

The following applications should be installed on the same servers:

- Frontend
- WebApi
- Content

Installation procedure:

1. Install all necessary infrastructure items
2. Set up application's certificate on IIS
3. Unpack the installer package for Web
4. Set up config.json
5. Run PowerShell in Administrative Mode
6. Execute Setup.ps1 script and follow the instructions
 - a. Select an installation directory
 - b. Set up application pool's service account credentials
 - i. Service account needs to have access to storage (shared drive)

Configuration

Pitchflow Web server installation is parametrized by config.json file. The file contains data for WebApi, Content and Frontend web applications.

The following parameters must be set correctly to make a proper WebApi installation:

Parameter	Description
name	Name of the application
applicationPool_Name	Name of application pool to be created on IIS
applicationPool_DotNetVersion	.NET framework version for application pool above
site_name	Site name for the application. For instance, if configured domain is set to pitchflow.com and site name to api, the endpoint will be exposed at https://api.pitchflow.com
wwwrootName	Directory name to which WebApi will be installed
PackageLocation	Directory name of WebApi application in an installation package
Storage.BasePath	Path to shared folder where Pitchflow files (slides, images, avatars) are stored

Cors.Origins	CORS setup, main application endpoint
Cache.Redis.ConnectionString	Connection string to Redis distributed cache
SignalR.Redis.ConnectionString	Connection string to Redis distributed cache
SignalR.Redis.EventKey	Unique event key for Redis cache
Mongo.ConnectionString	Connection string to MongoDB (application data storage)
Mongo.Database	Database name
ElasticSearch.Uri	Connection string to ElasticSearch
ElasticSearch.IndexName	Unique name of ElasticSearch index
Auth.Cookie.Domain	Domain for an authentication cookie
Auth.Login.ReturnUrl	Redirect endpoint on logging in
Auth.Logout.ReturnUrl	Redirect endpoint on logging out
MessageBus.Brokers	Connection string to Kafka message bus
MessageBus.Kafka.PartitionCount	The number of partitions specified in Apache Kafka (should be equal to partitions count configured in Apache Kafka and number of Workers of a given type)
Auth.SAML2.IdP	Identity Provider's URL, should be the same as Service Provider's Name attribute value from saml.config
nlogPath	Path to log files
internalNlogPath	Path to internal log files

Additionally, WebApi contains saml.config file which holds an information about AD FS configuration. This file must be re-configured manually after the installation is complete.

The following parameters must be set correctly to make a proper Content installation:

Parameter	Description
Name	Name of the application
applicationPool_Name	Name of application pool to be created on IIS
applicationPool_DotNetVersion	.NET framework version for application pool above
site_name	Site name for the application. For instance, if configured domain is set to <i>pitchflow.com</i> and site name to <i>content</i> , the endpoint will be exposed at https://content.pitchflow.com
wwwrootName	Directory name to which Content will be installed
PackageLocation	Directory name of Content application in an installation package
Storage.BasePath	Path to shared folder where Pitchflow files (slides, images, avatars) are stored
Cors.Origins	CORS setup, main application endpoint

Cache.Redis.ConnectionString	Connection string to Redis distributed cache
SignalR.Redis.ConnectionString	Connection string to Redis distributed cache
Mongo.Database	Database name
Auth.Login.ReturnUrl	Redirect endpoint on logging in
Auth.Logout.ReturnUrl	Redirect endpoint on logging out
MessageBus.Brokers	Connection string to Kafka message bus
MessageBus.Kafka.PartitionCount	The number of partitions specified in Apache Kafka (should be equal to partitions count configured in Apache Kafka and number of Workers of a given type)
nlogPath	Path to log files
internalNlogPath	Path to internal log files

The following parameters must be set correctly to make a proper Frontend installation:

Parameter	Description
Name	Name of the application
applicationPool_Name	Name of application pool to be created on IIS
applicationPool_DotNetVersion	.NET framework version for application pool above
site_name	Site name for the application. For instance, if configured domain is set to <i>pitchflow.com</i> and site name to <i>www</i> , the endpoint will be exposed at https://www.pitchflow.com
wwwrootName	Directory name to which Frontend will be installed
PackageLocation	Directory name of Frontend application in an installation package

Most of Frontend parameters are preconfigured by Evalueserve and need to be provided before the installation. The configuration items include all the application endpoints (WebApi, Content and Frontend) and the following parameters:

Name	Description	Default value
<i>uploadTimerWarningShow</i>	Time after which warning is shown on upload	
<i>uploadTimerCancelUploadTime</i>	Time after which upload is cancelled automatically. Measured since upload warning is shown	
<i>sectorFieldGuid</i>	Database Id of sector's attribute used for Template	629B760D-5847-4E5B-99F2-D17CC1067920
<i>sectorValuesDictionaryGuid</i>	Database Id of sector's dictionary	A3117CF5-790F-43E0-BC39-7C2CBF5B647E

<i>filterTemplatesBy</i>	Template's filtering attributes	['8904A98E-1B8E-4268-A859-8C02AE7C12EC', 'B4F00F25-7795-4540-895D-ADB366AB5896']
<i>defaultSecurityOption</i>	Private/Public/Department	
<i>allowSecurityOptionSelection</i>	If false, it is not possible to select security option by user	

Office Servers

Installation

The following applications should be installed:

- Seeder
- Worker
- Scheduler

Installation procedure:

1. Install all necessary infrastructure items
2. Unpack the installer package for Office
3. Set up config.json
4. Run PowerShell in Administrative Mode
5. Execute Setup.ps1 script and follow the instructions
 - a. Select an installation directory
 - b. Install all the services
 - i. Scheduler and Seeder only on Office1
 - c. Set up windows service's account credentials
 - i. Service account needs to have access to storage (shared drive)

Configuration

Pitchflow Office server installation is parametrized by config.json file. The file contains data for Scheduler, Workers and Seeder web applications.

The following parameters must be set correctly to make a proper Scheduler installation:

Parameter	Description
rootFolder	Directory name to which Scheduler will be installed
configFileName	Name of scheduler's configuration file
exeFileName	Name of scheduler's exe file
InstallService	Should scheduler's service be installed
Mongo.ConnectionString	Connection string to MongoDB (application data storage)
Mongo.Database	Database name
MessageBus.Brokers	Connection string to Kafka message bus
MessageBus.Kafka.PartitionCount	The number of partitions specified in Apache Kafka (should be equal to partitions count)

	configured in Apache Kafka and number of Workers of a given type)
quartz.plugin.jobInitializer.fileNames	Absolute path to jobs.config file Note: full path is required
nlogPath	Path to log files
internalNlogPath	Path to internal log files

The following parameters must be set correctly to make a proper Seeder installation:

Parameter	Description
rootFolder	Directory name to which Seeder will be installed
configFileName	Name of Seeder's configuration file
exeFileName	Name of Seeder's exe file
InstallService	Should Seeder's service be installed
Mongo.ConnectionString	Connection string to MongoDB (application data storage)
Mongo.Database	Database name
ElasticSearch.Uri	Connection string to ElasticSearch
ElasticSearch.IndexName	Unique name of ElasticSearch index
Cache.Redis.ConnectionString	Connection string to Redis distributed cache
Storage.BasePath	Path to shared folder where Pitchflow files (slides, images, avatars) are stored
nlogPath	Path to log files
internalNlogPath	Path to internal log files

Each Office server may contain multiple, specialized Workers. Default installation creates 3 types of Workers – Standard, Images and Long-running. The main difference between these Workers is a list of Apache Kafka topics they can handle. Additionally, each Worker type may be installed multiple times in order to improve messages handling performance.

Workers config.json configuration contains a section *sharedAppSettings* that applies to all Worker's instances. Specific Worker's configurations are stored within *instances* section.

It is possible to use `###InstanceId###` within *instances* section – the tag is replaced with an unique instance id (per server).

The following parameters must be set correctly to make a proper Workers installation:

Parameter	Description
rootFolder	Directory name to which Workers will be installed
configFileName	Name of Worker's configuration file
exeFileName	Name of Worker's exe file
InstallService	Should Worker's service be installed
Instance-Count	Number of instances of particular Worker type
Instance-Type	Worker type name (Standard, Images and LongRunning by default)
SharedFolder	Path to a folder where UserSyncOut is storing users json. The path is extended with tenant's Id (BankA)
Mongo.ConnectionString	Connection string to MongoDB (application data storage)
Mongo.Database	Database name
ElasticSearch.Uri	Connection string to ElasticSearch
ElasticSearch.IndexName	Unique name of ElasticSearch index
Cache.Redis.ConnectionString	Connection string to Redis distributed cache
Storage.BasePath	Path to shared folder where Pitchflow files (slides, images, avatars) are stored
Notifications.*	Configuration for e-mail sending
UserSyncIn.Admins	E-mails of AD users that will be set as Administrators on data seeding
Worker.*	Worker's Windows Service information
MessageBus.InstanceId	Unique instance Id for message bus (different on every server). Environment variable can be used: \${VARIABLE_NAME}
MessageBus.*	Apache Kafka topics handled by particular Worker's instance
nlogPath	Path to log files
internalNlogPath	Path to internal log files

Post Installation

- Stop Worker and Scheduler services
- Run Seeder
 - Seeds the database with initial data
 - `Evalueserve.Cogito.Tools.DataSeeder.exe --noUsers`
 - Initiates ElasticSearch
 - `Evalueserve.Cogito.Tools.DataSeeder.exe --elastic --reindex`
- Start Worker and Scheduler services
- Execute UserSyncOut PowerShell script to pull data from Active Directory

ADFS Servers

ADFS needs to be properly configured to handle SSO initiated by Pitchflow. The configuration steps are:

- Download Pitchflow certificate and store it on ADFS servers
- Add Pitchflow as *Relying Party Trust*

Option	Value	
Relying party identifier	Domain where the WebApi is hosted	
SAML Assertion Consumer Endpoint	Binding	POST
	Trusted URL	Confirm login Pitchflow URL
SAML Logout Endpoint	Binding	POST
	Trusted URL	Domain where the WebApi is hosted
	Response URL	Confirm logout Pitchflow URL

- Add *Claim Insurance Policy*

Option	Value
Attribute store	Active Directory
Mapping	<i>E-Mail Addresses → Name ID</i>

- Export ADFS certificate to Web servers

Logging

Every Pitchflow application's config file has a separate logging set-up (NLog). By default, the data is written asynchronously to log files. The path of the files is specified within `<nlog>` tag in the configuration.

Option	Value
internalLogFile	Path for internal nlog logger, helpful when there are problems with nlog configuration
asyncFile logger → filename	Rolling file name where logs are stored

Troubleshooting

Server	Problem	Resolution
Web, Office	librdkafka.dll exception	Install Microsoft Visual C++ 2013 Redistributable (x86) and Microsoft Visual C++ 2013 Redistributable (x64)

Post Installation Configuration

Pitchflow's metadata is configurable directly from mongodb.

Collection	Items	
Tenants	Name	Description

	TermsAndConditionsHtml	Html that should be shown on first sign-in (Terms and Conditions)
	ContactMailToTemplate	<i>mailto</i> element that should be executed when user needs help (envelope icon on Settings).
	ContentTypes	<p>Mutually exclusive items for Affiliation</p> <ul style="list-style-type: none"> • Project • Template <p>that describe parameters on project/template creation. Each item contains parameters that can be a reference to ParametersDictionary, a date or a text value.</p> <p>Note: only <i>One</i> Cardinality is available now.</p>
	EvalueserveUrl	Url to a page that should open in a new tab when slide is being assigned to Evalueserve. If empty, it is impossible to assign to Evalueserve.
	Logo	Base64 logo that is displayed instead of Evalueserve logo
NotificationTypes	Name	Description
	ContentTemplate	<p>Template for a given notification. Dynamic fields are specified in double-curly brackets.</p> <p>Example: {{Slide.Title}}</p>
	TitleTemplate	Title of a notification
	NotificationForm	<p>Specifies where the notification should be sent:</p> <ul style="list-style-type: none"> • Email • InApp – visible in Notifications screen • SignalR – immediate toast on a top of the screen • All
	IsConfigurable	Specifies whether user can switch off the notification
ParameterDictionaries	Specifies value dictionaries that can be attached to Project/Template creation.	

Appendix

Configuration Items

WebApi Configuration

Name	Description	Default value
<i>Application.DefaultTemplateId</i>	Database Id of the default template. Used when no template is selected on project's creation.	2D29B21D-E1C4-4BA7-B7C2-E9E8563F000B
<i>Application.SectorDictionaryId</i>	Database Id of sector's dictionary	A3117CF5-790F-43E0-BC39-7C2CBF5B647E
<i>Application.SectorAttributeIdForProject</i>	Database Id of sector's attribute used for Project	40D995BF-37AD-45D3-A824-D8D77DCC689E
<i>Application.SectorAttributeIdForTemplate</i>	Database Id of sector's attribute used for Template	629B760D-5847-4E5B-99F2-D17CC1067920
<i>Storage.BasePath</i>	Path to shared folder where Pitchflow files (slides, images, avatars) are stored	
<i>Storage.DefaultExpirationHours</i>	Time after which non-used files are removed from storage	24
<i>Cors.Origins</i> <i>Cors.Headers</i> <i>Cors.Methods</i> <i>Cors.SupportsCredentials</i>	CORS configuration	Support credentials and allow all headers and methods
<i>Cache.Redis.ConnectionString</i>	Connection string to Redis distributed cache	
<i>Cache.DefaultProfile</i> <i>Cache.Profile.Config.TTL</i> <i>Cache.Profile.Default.TTL</i> <i>Cache.Profile.Users.TTL</i>	Default profile for cache	Default 01:00:00 00:01:00 00:02:00
<i>SignalR.Redis.ConnectionString</i>	Connection string to Redis distributed cache used for SignalR	
<i>SignalR.Redis.EventKey</i>	Unique event key for Redis cache	Pitchflow
<i>Mongo.ConnectionString</i>	Connection string to Mongo Database (application data storage)	
<i>Mongo.Database</i>	mongodb name	
<i>ElasticSearch.Uri</i>	Connection string to ElasticSearch	
<i>ElasticSearch.IndexName</i>	Unique name of ElasticSearch index	pitchflow

<i>Auth.Session.Cookie.Name</i>	Unique name of authentication session	PitchflowSession
<i>Auth.Cookie.Name</i>	Unique name of authentication cookie	PitchflowAuth
<i>Auth.Cookie.Expiration</i>	Cookie expiration threshold	30
<i>Auth.Cookie.Domain</i>	Cookie domain	
<i>Auth.Cookie.Path</i>	Cookie path	
<i>Auth.Login.Path</i>	Login path	/auth/login
<i>Auth.Login.ConfirmPath</i>	Confirm login path	/auth/confirmLogin
<i>Auth.Login.ReturnUrl</i>	After sign-in return path	
<i>Auth.Logout.Path</i>	Logout path	/auth/logout
<i>Auth.Logout.ConfirmPath</i>	Confirm logout path	/auth/confirmLogout
<i>Auth.Logout.ReturnUrl</i>	Logout return url	
<i>Auth.Login.ReturnPath</i>	Login return path	/auth/loginToken
<i>Auth.Logout.ReturnPath</i>	Logout return path	/auth/logoutReturn
<i>PresentationHandling.Split.*</i>	Not used	
<i>Auth.SAML2.IdP</i>	Identity Provider's URL, should be the same as Service Provider's Name attribute value from <i>saml.config</i>	
<i>MessageBus.InstanceId</i>	Unique instance Id for message bus (different on every server). Environment variable can be used: <code>\${VARIABLE_NAME}</code>	<code>\${PITCHFLOW_ENV_ID}</code>
<i>MessageBus.Brokers</i>	Connection string to Kafka message bus	
<i>MessageBus.DefaultTimeout</i>	Timeout for Kafka messages	30
<i>MessageBus.SharedGroup</i>	Kafka group (same for every Web app on web servers)	PitchflowWebApi
<i>MessageBus.*.Topic</i>	Unique topic name	
<i>MessageBus.*.Instances</i>	Number of instances that can process a given topic's message	
<i>MessageBus.*.Enabled</i>	Is topic enabled	
<i>MessageBus.Kafka.CustomPartitioning</i>	Should Apache Kafka use custom partitioning	True
<i>MessageBus.Kafka.PartitionCount</i>	The number of partitions specified in Apache Kafka (should be equal to number of Workers)	
<i>Slide.NewSlideTimeInHours</i>	For how long [h] should NEW marker be shown next to the slide after upload	1

<i>Logging.RequestResponse</i>	Should WebApi log request/response	
--------------------------------	------------------------------------	--

Content Configuration

Name	Description	Default value
<i>Storage.BasePath</i>	Path to shared folder where Pitchflow files (slides, images, avatars) are stored	
<i>Storage.DefaultExpirationHours</i>	Time after which non-used files are removed from storage	24
<i>Cors.Origins</i> <i>Cors.Headers</i> <i>Cors.Methods</i> <i>Cors.SupportsCredentials</i>	CORS configuration	Support credentials and allow all headers and methods
<i>Cache.Redis.ConnectionString</i>	Connection string to Redis distributed cache	
<i>Cache.DefaultProfile</i> <i>Cache.Profile.Config.TTL</i> <i>Cache.Profile.Default.TTL</i> <i>Cache.Profile.Users.TTL</i>	Default profile for cache	Default 01:00:00 00:01:00 00:02:00
<i>Mongo.ConnectionString</i>	Connection string to mongodb database (application data storage)	
<i>Mongo.Database</i>	mongodb database name	
<i>Auth.Session.Cookie.Name</i>	Unique name of authentication session	PitchflowSession
<i>Auth.Cookie.Name</i>	Unique name of authentication cookie	PitchflowAuth
<i>Auth.Cookie.Expiration</i>	Cookie expiration threshold	30
<i>Auth.Cookie.Domain</i>	Cookie domain	
<i>Auth.Cookie.Path</i>	Cookie path	
<i>Auth.Login.Path</i>	Login path	/auth/login
<i>Auth.Login.ConfirmPath</i>	Confirm login path	/auth/confirmLogin
<i>Auth.Login.ReturnUrl</i>	After sign-in return path	
<i>Auth.Logout.Path</i>	Logout path	/auth/logout
<i>Auth.Logout.ConfirmPath</i>	Confirm logout path	/auth/confirmLogout
<i>Auth.Logout.ReturnUrl</i>	Logout return url	
<i>Auth.Login.ReturnPath</i>	Login return path	/auth/loginToken
<i>Auth.Logout.ReturnPath</i>	Logout return path	/auth/logoutReturn
<i>MessageBus.InstanceId</i>	Unique instance Id for message bus (different on	\${PITCHFLOW_ENV_ID}

	every server). Environment variable can be used: \${VARIABLE_NAME}	
<i>MessageBus.Brokers</i>	Connection string to Kafka message bus	
<i>MessageBus.DefaultTimeout</i>	Timeout for Kafka messages	30
<i>MessageBus.*.Topic</i>	Unique topic name	
<i>MessageBus.*.Instances</i>	Number of instances that can process a given topic's message	
<i>MessageBus.*.Enabled</i>	Is topic enabled	

SAML Configuration

Name	Description	Default value
<i>ServiceProvider</i>		
<i>Name</i>	Domain where the WebApi is hosted	
<i>LocalCertificateFile</i>	Path to SAML requests certificate	
<i>PartnerIdentityProvider</i>		
<i>Name</i>	Identity provider name - it must match with the issuer name ADFS uses in the returned SAML response	
<i>SingleSignOnServiceUrl</i>	ADFS sign-in endpoint with Pitchflow's WebApi endpoint as <i>loginToRp</i> parameter	
<i>SingleLogoutServiceUrl</i>	ADFS sign-out endpoint	
<i>PartnerCertificateFile</i>	ADFS certificate to verify signed responses	

Seeder Configuration

Name	Description	Default value
<i>Storage.BasePath</i>	Path to shared folder where Pitchflow files (slides, images, avatars) are stored	
<i>Cache.Redis.ConnectionString</i>	Connection string to Redis distributed cache	
<i>Cache.DefaultProfile</i> <i>Cache.Profile.Config.TTL</i> <i>Cache.Profile.Default.TTL</i> <i>Cache.Profile.Users.TTL</i>	Default profile for cache	Default 01:00:00 00:01:00 00:02:00
<i>Mongo.ConnectionString</i>	Connection string to Mongo Database (application data storage)	
<i>Mongo.Database</i>	Name of Mongo Database	
<i>ElasticSearch.Uri</i>	Connection string to ElasticSearch	
<i>ElasticSearch.IndexName</i>	Unique name of ElasticSearch index	pitchflow
<i>Aspose.License</i>	Path to <i>Aspose.Slides.lic</i> file (stored in Seeder's directory by default)	
<i>Presentation.Library</i>	Library used to handle PowerPoint presentations (OpenXml Aspose)	OpenXml

Scheduler Configuration

Name	Description	Default value
<i>Scheduler.ServiceName</i>	Windows service name	
<i>Scheduler.DisplayName</i>	Windows service display name	
<i>Scheduler.InstanceId</i>	Unique instance Id, applies if more instances are installed on the server.	Primary
<i>Mongo.ConnectionString</i>	Connection string to Mongo Database (application data storage)	
<i>Mongo.Database</i>	Name of Mongo Database	
<i>MessageBus.InstanceId</i>	Unique instance Id for message bus (different on every server). Environment variable can be used: \${VARIABLE_NAME}	

<i>MessageBus.Brokers</i>	Connection string to Kafka message bus	
<i>MessageBus.DefaultTimeout</i>	Timeout for Kafka messages	30
<i>MessageBus.*.Topic</i>	Unique topic name	
<i>MessageBus.*.Instances</i>	Number of instances that can process a given topic's message	
<i>MessageBus.*.Enabled</i>	Is topic enabled	
<i>NotificationsSender.SingleJobLimit</i>	Determines how many notifications can be sent at one time	100

Worker Configuration

Name	Description	Default value
<i>Worker.ServiceName</i>	Windows service name	
<i>Worker.DisplayName</i>	Windows service display name	
<i>Worker.InstanceId</i>	Unique instance Id, applies if more instances are installed on the server.	Primary
<i>Aspose.License</i>	Path to <i>Aspose.Slides.lic</i> file (stored in Seeder's directory by default)	
<i>Presentation.Library</i>	Library used to handle PowerPoint presentations (OpenXml Aspose)	OpenXml
<i>SharedFolder</i>	Path to a folder where UserSyncOut is storing users json. The path is extended with tenant's Id	
<i>Storage.BasePath</i>	Path to shared folder where Pitchflow files (slides, images, avatars) are stored	
<i>Storage.DefaultExpirationHours</i>	Time after which non-used files are removed from storage	24

<i>Cache.Redis.ConnectionString</i>	Connection string to Redis distributed cache	
<i>Cache.DefaultProfile</i> <i>Cache.Profile.Config.TTL</i> <i>Cache.Profile.Default.TTL</i> <i>Cache.Profile.Users.TTL</i>	Default profile for cache	Default 01:00:00 00:01:00 00:02:00
<i>Mongo.ConnectionString</i>	Connection string to Mongo Database (application data storage)	
<i>Mongo.Database</i>	Name of Mongo Database	
<i>ElasticSearch.Uri</i>	Connection string to ElasticSearch	
<i>ElasticSearch.IndexName</i>	Unique name of ElasticSearch index	pitchflow
<i>MessageBus.InstanceId</i>	Unique instance Id for message bus (different on every server). Environment variable can be used: \${VARIABLE_NAME}	
<i>MessageBus.Brokers</i>	Connection string to Kafka message bus	
<i>MessageBus.DefaultTimeout</i>	Timeout for Kafka messages	30
<i>MessageBus.SharedGroup</i>	Kafka group (same for every Worker app on web servers)	PitchflowWorker
<i>MessageBus.*.Topic</i>	Unique topic name	
<i>MessageBus.*.Instances</i>	Number of instances that can process a given topic's message	
<i>MessageBus.*.Enabled</i>	Is topic enabled	
<i>CleanUpProjects.CutOffInDays</i>	Time after which project's history is being removed	1
<i>CleanUpUploadedPresentations.CutOffInHours</i>	Time after which uploaded presentation's data is being removed	3
<i>UserSyncIn.Admins</i>	E-mails of AD users that will be set as Administrators on data seeding	

<i>Notifications.SenderEmail</i> <i>Notifications.SenderName</i> <i>Notifications.SenderHost</i> <i>Notifications.SenderPort</i> <i>Notifications.Password</i>	E-mail server configuration for notifications sending	
<i>Services.ShouldSaveRemovedSlidesAndSectionsToResearch</i>	If true, removed slides are stored in Research folder	
<i>Presentation.UseLegacyWriter</i>	For legacy driver support	false
<i>PresentationExporter:PptxExportMode</i>	Slide export library	OpenXml
<i>Backup.*</i>	Backups configuration	

Evalueserve Disclaimer

The information contained in this report has been obtained from reliable sources. The output is in accordance with the information available on such sources and has been carried out to the best of our knowledge with utmost care and precision. While Evalueserve has no reason to believe that there is any inaccuracy or defect in such information, Evalueserve disclaims all warranties, expressed or implied, including warranties of accuracy, completeness, correctness, adequacy, merchantability and / or fitness of the information.

For distribution within Wells Fargo's Pitchflow Project team only. Private and confidential, may not be shared without Evalueserve's consent.