

# Zementis 10.1

## Release Notes

---

These Release Notes apply to Software AG Zementis Predictive Analytics 10.1.

A Zementis Product License Key is required in order to use Zementis. Please contact Software AG directly to obtain your Product License Key.

If you have an existing Zementis installation, please take a backup of artifacts uploaded in Zementis. If Zementis is deployed as a server, sources for these artifacts can be downloaded from Zementis Web Console. Alternatively, you can use the migration script available under migration folder of Zementis 10.1 distribution package. If Zementis is deployed as a Java library, sources for these artifacts can be downloaded by invoking `ModelsServiceProvider.exportSource(modelName)` and `LibraryManager.exportResourceFile(name)` respectively. Upgrading to Zementis 10.1 will require a clean repository store.

---

## Contents

Release Highlights .....	2
New with Release 10.1 .....	2
New with Release 5.0 .....	2
New with Release 4.2.5 .....	2
New with Release 4.0 .....	3
New with Release 3.8 .....	3
Support .....	3

---

# Release Highlights

## New with Release 10.1

- Optimized processing of large tree-ensemble models and deep learning models.
- New design for Zementis Web Console.
- Portable Java client for REST services that allows full duplex streaming for batch apply operation.
- Improved message reporting in PMML when performing syntactic and semantic checks.

## New with Release 5.0

- Compatibility and automatic model conversion to PMML 4.3.
- Support for deep learning models.
- Support for k-NN algorithm.
- New design for Zementis Web Console.
- Download/upload serialized model:
  - Protect and deliver your proprietary models with Zementis without revealing model internals, i.e., without exposing the PMML model to a 3rd party
- Model activation/de-activation at runtime:
  - De-activation evicts model from JVM heap, allowing Zementis to manage more models than available heap
- Support for binary (octet-stream) data type.
- Asynchronous processing for data residing on Amazon AWS S3 bucket via REST/Web Service API.
- Improved support for STATISTICA models.

## New with Release 4.2.5

- Added support for managing custom resources via Web Service and RESTful API.
- Simplified Java API for easy integration with existing Java applications.
- Fast model upload option for PMML files that do not require comprehensive syntactic and semantic corrections.
- Added concurrency and batch-size parameters to Zementis Models Web Service and Zementis RESTful API for batch scoring.
- Zementis certified for deployment on Apache Tomcat 7.x. and 8.x.
- Compatibility and automatic model conversion to PMML 4.2.1.
- Optimized data pre- and post-processing including input validation for handling invalid, missing and outlier values.

### **New with Release 4.0**

- Compatibility and automatic model conversion to PMML 4.2. Support for all the new features introduced in PMML 4.2, including:
  - TextIndex element for text mining
  - Built-in functions matches, replace and concat
  - ComplexPartialScore element for Scorecards
  - TargetValueStats element for Naive Bayes classifiers
  - Usage type change from "predicted" to "target"
  - Simplified Output element features and support for segment id for multiple models
- Automatic placement of Output element in a PMML file if missing and creation of an output field to represent the predicted value.
- Deprecated Zementis extensions to PMML 4.1:
  - Built-in functions Zementis:matches, Zementis:replace and Zementis:concat
  - Scorecard extension "PARTIAL\_SCORE\_FIELD"
- Optimized Random Forest model processing to speed up loading time and reduce memory footprint.
- Added RESTful API on top of Zementis scoring engine. This feature is available when Zementis is deployed as a server.
- Added `explainApply` operation to Zementis Models Web Service.

### **New with Release 3.8**

- PMML conversion/correction is by-passed if an already Zementis-converted PMML file is uploaded.
- Users can now upload compressed PMML file (zip/gzip). The PMML file needs to be the only entry in the zip/gzip file.
- In a multiple-model, users can now access specific segment outputs from the top model.

---

## **Support**

If you need technical support, please visit our support site at :

<http://support.Zementis.com/>

Please contact Software AG directly for additional assistance by visiting :

<https://support.Zementis.com/hc/en-us/requests/new>

and submitting your request.

---

Copyright (c) 2004-2016 Zementis, Inc. All rights reserved.  
Copyright © 2016-2017 Software AG, Darmstadt, Germany and/or Software AG USA Inc.,  
Reston, VA, USA, and/or its subsidiaries and/or its affiliates and/or their licensors.

The name Software AG and all Software AG product names are either trademarks or registered trademarks of Software AG and/or Software AG USA Inc. and/or its subsidiaries and/or its affiliates and/or their licensors. Other company and product names mentioned herein may be trademarks of their respective owners.

Detailed information on trademarks and patents owned by Software AG and/or its subsidiaries is located at <http://softwareag.com/licenses>.

This software may include portions of third-party products. For third-party copyright notices, license terms, additional rights or restrictions, please refer to "License Texts, Copyright Notices and Disclaimers of Third Party Products". For certain specific third-party license restrictions, please refer to section E of the Legal Notices available under "License Terms and Conditions for Use of Software AG Products / Copyright and Trademark Notices of Software AG Products". These documents are part of the product documentation, located at

<http://softwareag.com/licenses> and/or in the root installation directory of the licensed product(s).

Use, reproduction, transfer, publication or disclosure is prohibited except as specifically provided for in your License Agreement with Software AG.

ZAD-RN-101-20171017