

# **CASE STUDIES**

# Aspose.Total Case Study



**TIVITY GmbH** 

Using Aspose.Total.Net to convert documents

Vladimir Juric, CEO, 17th November 2015

### **About TIVITY**

Tivity is a German SaaS Startup founded in 2015. Backed by a self-developed mobile enterprise application platform (MEAP) Tivity aims to improve enterprise mobility and productivity by a lean and customizable business suite. This set of business software functions enable and support core business processes inside and beyond organizational boundaries with focus on collaboration functionalities regardless of application.



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## Product

The Document Application Server provides basic document operations (Add, Delete, Check-In, Check-Out, Indexing etc.) and saves metadata of a document. Indexing documents for full-text search, generation of thumbnails (for image documents), conversion to PDF and generation of Single-Page PDF Preview and physical storage of the document as per configuration.

Documents Application Server saves document meta information e.g. document information, version, check-in/check-out/delete/restore/download access and history to its own database base. The physical storage of document is configurable as per storage provider (connectors) e.g. Microsoft SharePoint, Microsoft SQL Server, Cloud Storage Provider like Dropbox, OneDrive, Box, etc.

Indexing, Conversion and Thumbnail services can be configured to run as stand-alone Windows Services or can be run as a part of DMS Server. Running these services independent, reduces the waiting time during Check-in, Finalize, Create-New-Version, Delete and Restore operations. All database requests(queries) to fetch the metadata are parameterized to avoid SQL Injection.



### Problem

Server-side document conversion based on Microsoft Office was not performant and very unstable. Unfortunately, Microsoft does not recommend, and does not support the automation of Microsoft Office applications from any unattended, non-interactive client application or component (including ASP, ASP.NET, DCOM, and NT Services), because Office may exhibit unstable behavior and/or deadlock when Office is run in this environment.



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Although certain coding practices can help reduce the likelihood of this issue, these practices cannot prevent the issue entirely. This fact alone makes running Office Applications from a server-side environment risky and unsupported.

Even though different solution provider offer document processing services based on 3d party libraries such as Microsoft Office package, Microsoft Office Interop, OpenOffice SDK, etc. Tivity was searching for a provider with extensive processing and conversion capabilities without additional third party dependencies and was highly impressed by the multitude of supported file formats by Aspose.Total.

#### **Solution**

The integration and deployment of Aspose.Total for .NET was very fast due to the fact that it is just a group of class libraries without any dependencies (except on the .NET Framework itself). Regardless of integration efforts, we've covered a significant performance improvement. The average PDF-A Conversion went from ~ 13-18 documents/minute (by using MS Office Provider as conversion provider) to ~ 40-50 documents/minute (by using ASPOSE as conversion provider).



### Summary and next Steps

Tivity picked Aspose.Total for .NET after an intensive benchmarking of document processing providers. Stable and high performance conversion services are right now on demand, but the scope of Aspose.Total functionality is so great that our product development team was highly inspired by this incredibly versatile file processing capabilities of handling the most popular MS Office file formats. We were so inspired that upcoming products will focus on creation and modification of these files.