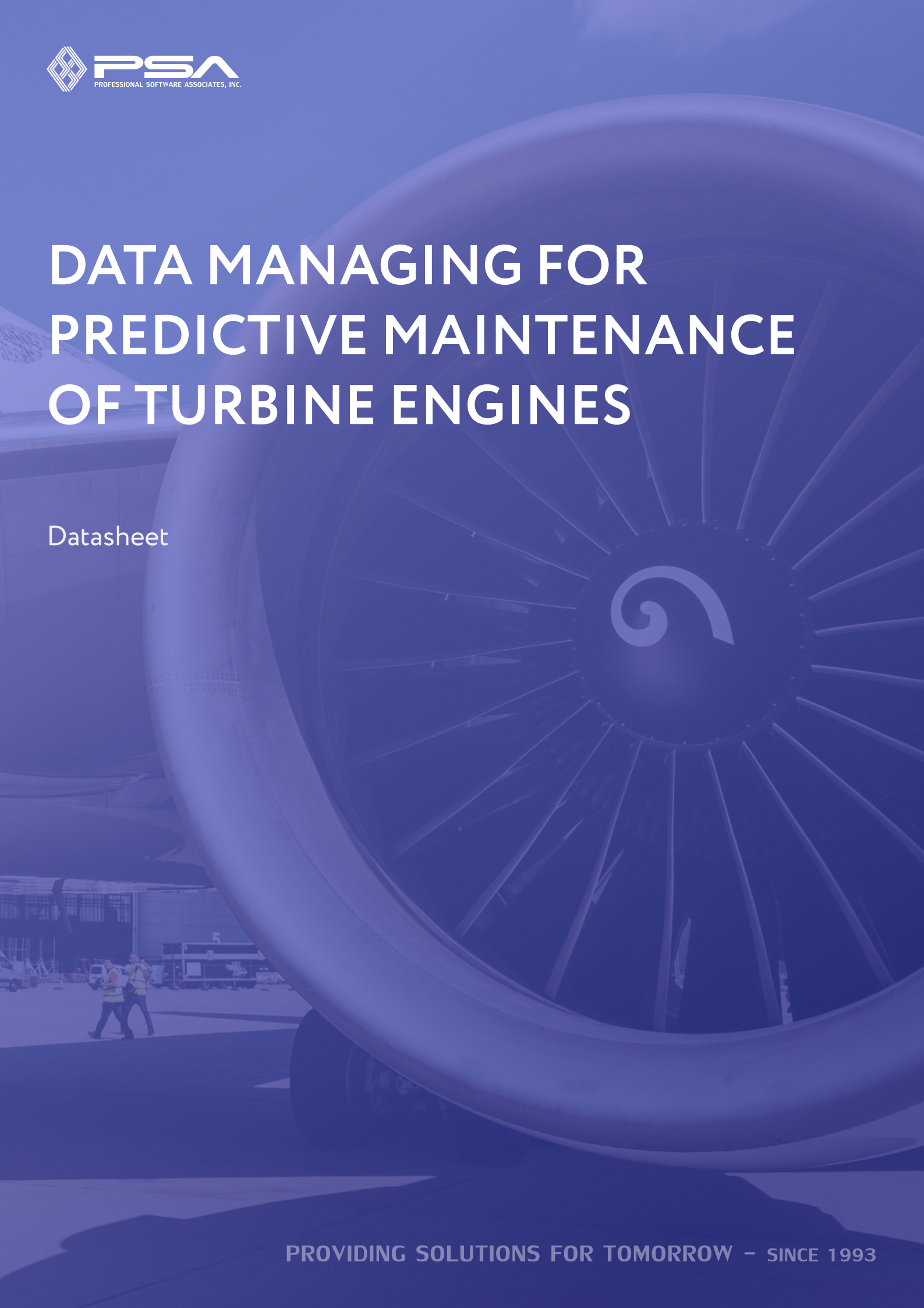
PSA
PROFESSIONAL SOFTWARE ASSOCIATES, INC.

DATA MANAGING FOR PREDICTIVE MAINTENANCE OF TURBINE ENGINES

Datasheet



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Project objective

Create a high-performance data storage toolkit for collecting, storing, retrieving, and maintaining raw data obtained from the sensors used to measure the vibrational characteristics of turbine engines or generators. The data hub plugin should have ensured the reliable monitoring of turbine engines.

Result

The delivered hub plugin supplies data for continuous monitoring of the turbine engines, which allows for effective predictive maintenance.

Scope of work

- Collect, organize, and save the volume of data from 300 000+ sensors which provide measuring every second
- Design and implement robust storage to save, retrieve, process, and maintain raw data
- The data to be stored in a set of highly indexed binary data files

Activities

- Software Architecture and Design
- Implementation and optimizations
- Software debugging and unit testing
- Functional and performance testing
- Warranty support

About the project

Technologies

- C++ (STL, BOOST)
- C#
- Entity Framework
- .NET, (WCF, WPF)
- SQLite
- SVNT
- FS
- MSTest
- CPPUnit
- MS Reporting service

Platforms

- Rally

Project size

- 4.5 people

Duration

20 months

March 2012 – December 2013