

MaxSync[®]

SEAMLESS DATA REPLICATION TO STREAMLINE YOUR ASSET MANAGEMENT

Whitepaper

21-feb-2022

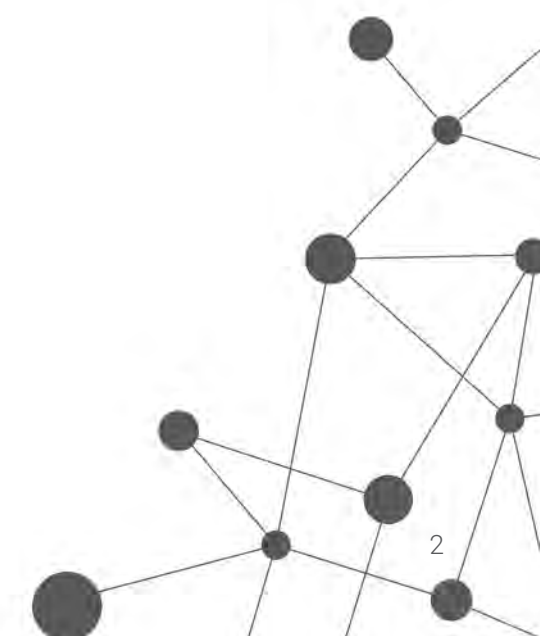
GEMBA



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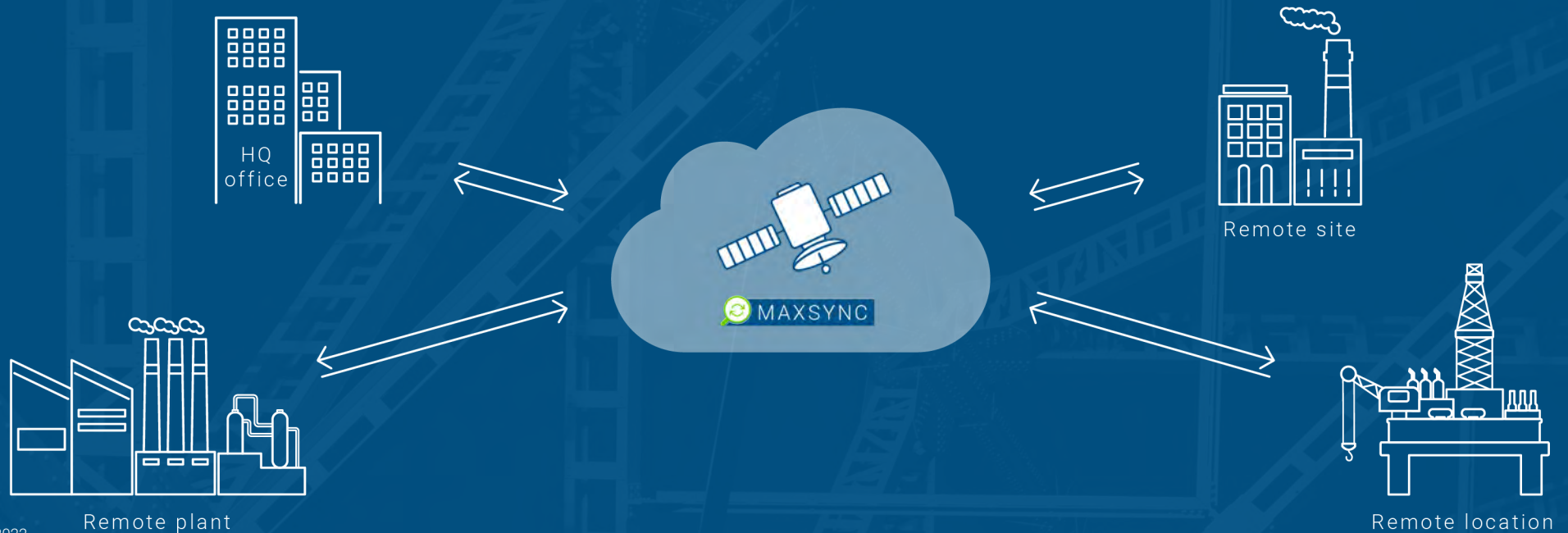
INTRODUCTION

It is no secret that access to up-to-date data across business locations is the key to effective asset management, operational excellence, and business growth. From performing key actions to monitoring the progress, the latest information enables employees to be more productive and efficient at their job. However, synchronizing data between HQ, regional offices, and remote locations remains a challenge for many businesses. Low latency, limited bandwidth, and automated recovery are some of the key factors that play a vital role in the availability of data.

MaxSync® is an enterprise-grade data replication and synchronization software for database and file systems. It is lightweight, platform-agnostic,

and highly configurable for a number of data replication use cases. You can easily scale it to hundreds of locations without any degradation in performance or synchronization issues. MaxSync® offers faster, flexible, and reliable data replication in near real-time without the need for any manual intervention or maintenance. It excels in remote conditions with limited network bandwidth and intermittent connectivity to ensure the high availability of up-to-date data.

MaxSync® easily integrates into IBM Maximo Asset Management and other systems with synchronization support for leading databases, operating systems, and data platforms.



WHY MAXSYNC[®] MAKES SENSE FOR ENTERPRISE DATA REPLICATION AND SYNCHRONIZATION

Platform Independent- Organizations use different operating systems, databases, and mobile devices based on their business objectives and employee preferences. Platform independence gives the flexibility to implement, migrate, and scale as and when required.

Multi-Threaded- Faster synchronization is crucial for the high availability of data across locations. Multi-threaded architecture handles multiple replication jobs in parallel without any added latency.

Automatic Recovery- Synchronization errors must be handled timely and without manual intervention for minimal business interruption. Automatic recovery helps the system recover from various issues quickly and safely without any data loss.

Everything you need for maximum Efficiency

Bi-Directional- It is vital to receive and send updated data between locations. Bi-directional synchronization capability allows data replication both to and from a location while avoiding infinite update loops and data discrepancy.

Transformation- End users may require the data in a particular format or just the data they need to see to perform their job. The data transformation feature enables users to filter, segment, and transform data while replicating it as per their needs.

Conflict Detection- Proactive issue detection and automatic resolution save time and avoid data discrepancy at scale. MaxSync[®]'s innovative conflict detection capabilities keep your data replication running properly for high availability and accuracy.

Table Schema- Updating database schema is often required to add, modify, or scale business processes. MaxSync[®] allows updating table schema from its interface to optimize your database operations.

WHY MAXSYNC[®] MAKES SENSE FOR ENTERPRISE DATA REPLICATION AND SYNCHRONIZATION

Central Configuration- Centralized configuration management is vital when multiple locations need bi-directional synchronization. All configurations are registered and managed from a central server and are always in sync for seamless replication and new integration.

Multiple Deployment Options- MaxSync[®] provides multiple deployments options to fit the need based on location, existing systems, and scaling requirements. You can embed it in your internal application, deploy it as a standalone on-premise engine, or launch it as a web application.

Remote Management- Offshore locations require remote management of data replication due to many limitations. MaxSyn provides multiple methods to manage and monitor data synchronization using command-line tools, REST APIs, and the JMX console.

Data replication and synchronization is not a new concept but doing it bi-directional between multiple locations with low latency and near real-time is a challenge. MaxSync[®] solves issues related to these dynamics with sophisticated communication methods, HTTP/S transport, faster data streaming protocol, and Plug-in APIs.

MaxSync[®] is fully tested with IBM Maximo with ready-to-deploy data synchronization templates.

Derive maximum value from your IBM Maximo

Supported Operating Systems

Windows, Linux, Unix, Mac OS X, Android, Embedded Systems, and more.

Supported Databases

IBM DB2, SQL Server, MySQL, PostgreSQL, Oracle, MongoDB, Cassandra, Apache HBase, Azure Cosmos, NuoDB, SYBASE, and more.

Supported Mobile Databases

Android, SQLite, Firebird, HyperAQL, and more.

USE CASES - HOW MAXSYNC[®] EMPOWERS DIFFERENT INDUSTRIES

Operational efficiency is all about data-driven decisions with better planning. Access to up-to-date information across all business locations is vital for employees to do their job efficiently with maximum productivity. MaxSync[®] empowers organizations with high data availability even in unfavorable network conditions.



Oil & Gas

Oil & Gas corporations have their assets in remote locations where network bandwidth is limited, and connectivity is intermittent. Using MaxSync[®] to replicate data to and from remote vessels and plant to HQ and regional offices enable more efficient, reliable, and safer operations with predictive maintenance.



Energy and Utility

Energy and Utility organizations that have power grids spread across a country or internationally can deploy MaxSync[®] with their asset management software, such as IBM Maximo, to run efficient, reliable, and sustainable operations. Access to near real-time information allows employees to monitor grid health, predict failures, and perform maintenance with data-driven decisions.



Manufacturing

Manufacturing businesses have their assembly line and supply chain spread over a number of locations. Integrating MaxSync[®] with their internal applications enables employees to keep tabs on different production and supply chain aspects with maximum accuracy. Near real-time information also helps achieve peak performance, lesser defects, and reduced downtime.

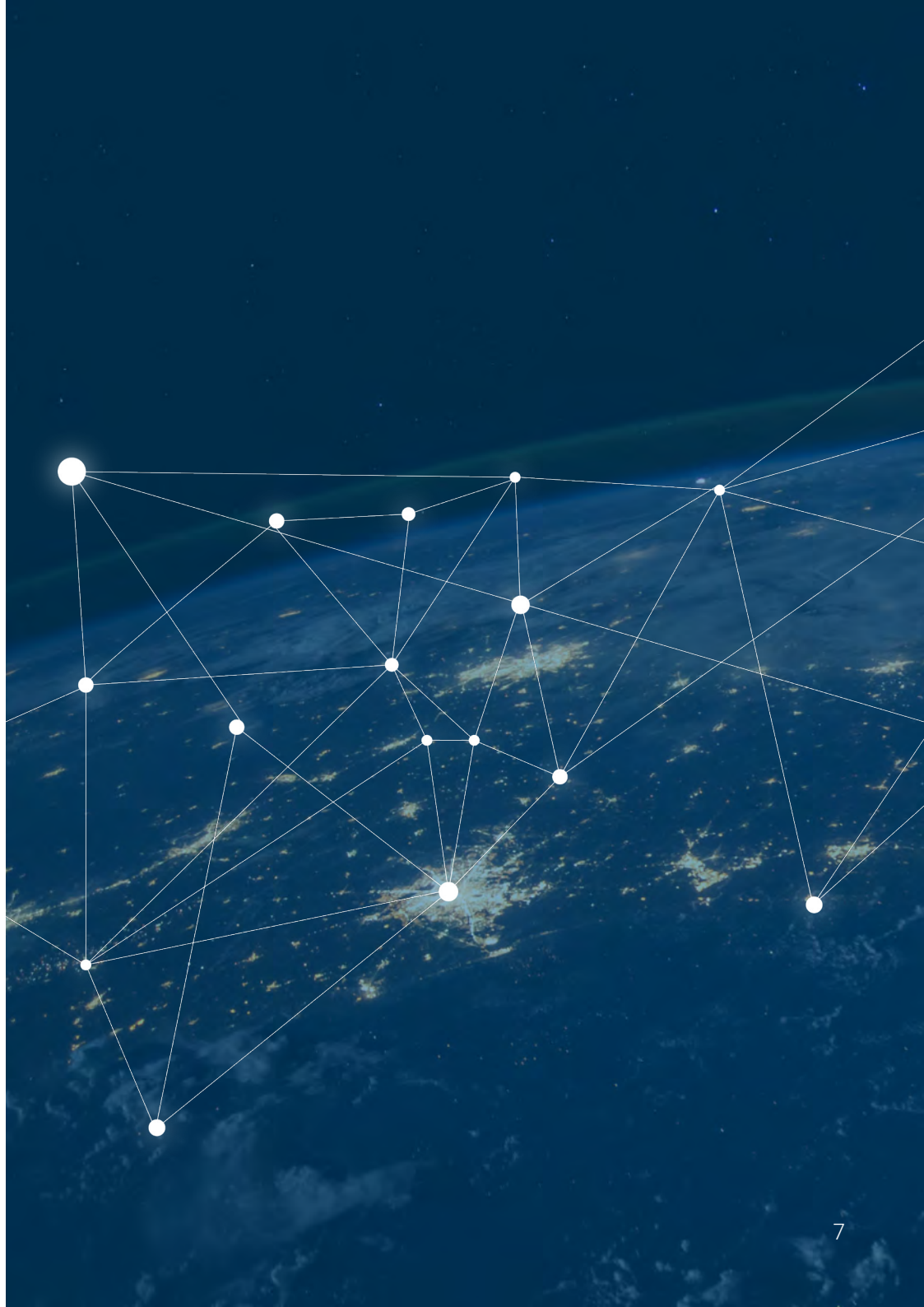
MaxSync[®] use cases do not stop here. It can be deployed for virtually any industry where data replication and synchronization are key for efficient operations.

Achieve operational excellence with MaxSync[®]



CONCLUSION

MaxSync® is a unique solution that solves the challenges of data synchronization between multiple business locations by overcoming connectivity problems of remote sites. Its use cases span multiple industries to achieve operational excellence, maximum productivity, predictive maintenance, and employee satisfaction. In addition, support for a wide range of operating systems and databases makes MaxSync® an ideal solution for fast, flexible, and reliable data replication software.



ABOUT GEMBA

Gemba specializes in Asset & Service Management systems, from consulting to implementation. With more than 500 projects in 20 years, the company built up extensive experience. With its smart IIoT (Industrial Internet of Things) solutions, Gemba also focuses on Asset Performance Management and making maintenance predictable. Gemba builds and integrates apps for mobile Asset & Service Management. Gemba is an IBM Gold Business Partner in the Netherlands and Belgium and has offices in both countries.

Gold
Business
Partner



EAM + DATA + IoT

GEMBA

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