

HULFT

HULFT Data Management Solution



HULFT

Move knowledge. Move markets.

Information, guiding the way to a future that supports human decision-making and prompts us to action. HULFT, by connecting data freely, provides a path to discovery/understanding/conceptualization and transforms that into valuable information.

The information you want, the way you want it, in your hands instantly.

HULFT helps you achieve the data utilization that supports your conceptualization of how you want to manage business and markets.

Sales Achievements

Reliability and achievements supported by many customers

HULFT, with the #1 highest sales share in Japan, and DataSpider, a data integration middleware with a collective total of installation by 3,000 domestic and overseas companies, are both highly evaluated by customers.



HULFT

*Source: Fuji Chimera Research Institute, Inc. Package Solutions Marketing Handbook 2004-2010, New Market of Software Business FY2011-2022 Version <file transfer tool package, monetary base> Sales achievements FY2003-2021



Member banks of Japanese Bankers Association

100%
rate of installation

*Based on all member banks (full members) posted on the homepage for the Japanese Bankers Association



Member companies of Japan Automobile Manufacturers Association

100%
rate of installation

*Based on the members posted on the homepage for the Japan Automobile Manufacturers Association

Globally Compatible

HULFT can safely be used even overseas

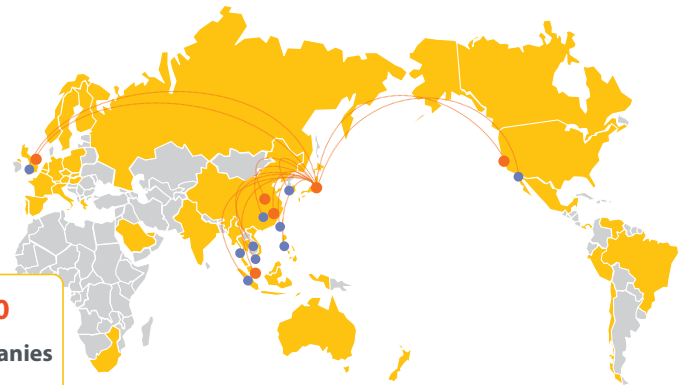
Sales achievements for global use of HULFT
Installed in **46** countries and
over **10,000** companies worldwide

- Saison Information Systems Co., Ltd. and overseas business sites: 9 business sites
- HULFT sales agents: 18 business sites
- Countries with HULFT users: 46 countries

(As of 2022)

Fortune Global 500
Adopted by **111** companies

Source: Fortune Global 500 from 2022



Commitment to "Safety and Security"

HULFT that is chosen for its total quality

HULFT quality born from thorough development and testing

Software code defect rate per shipped license

0.18%

*Software code defect rate per shipped license during 2022/3 (HULFT8 products)

Number of test implementations before release

200,000
items

Resolution rate at Level 1 technical support

94.6%

*Resolution rate at Level 1 technical support as of 2022/3 (HULFT8 products)

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Data Integration

Connected data integration tool

DataSpider

DataSpider is an integration platform that was developed in order to, in system environments with a mix of different types of data in different formats depending on the business purpose or application, realize simplified multi-integration and efficiently develop/operate applications that include data integration.

DataSpider Servista

Please see here for details



Features

Feature
01

"Connection" without the need to build anything

No data integration for each system and no specialized skills or knowledge are required!
You can link each system by drag and drop.

Feature
02

Many choices for connection destinations

A multitude of adapters are available, with over 50 types including the obvious major databases and applications as well as major cloud services.

Feature
03

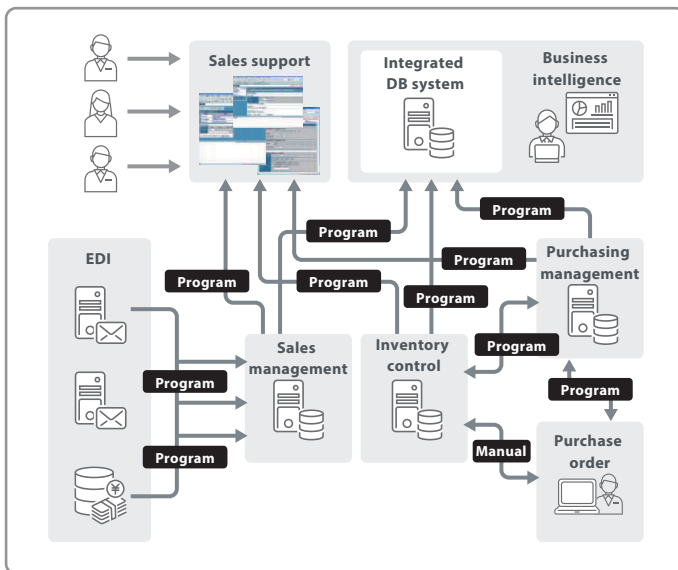
High-speed processing of large-volume data

Break up the execution of operations such as data extraction, conversion, and writing in order to process them more efficiently. Realize high-speed processing of large-volume data.

Utilization as a Data Integration Hub

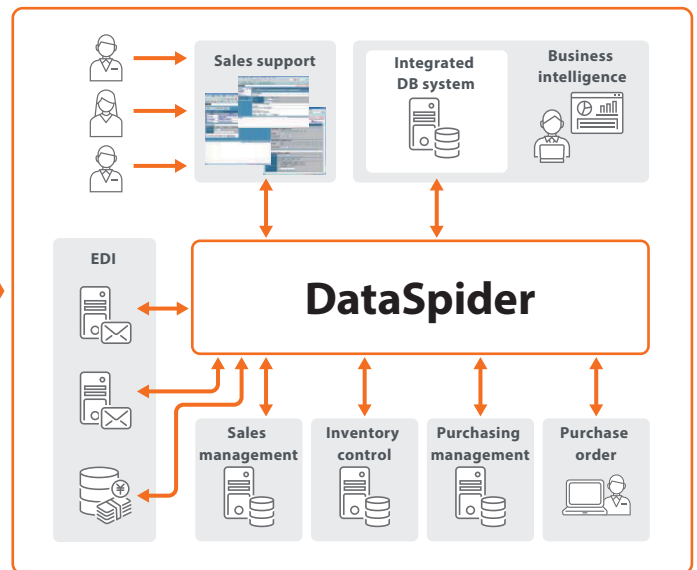
Before Prior to installing DataSpider

Data integration requires program development and manual operations for each system



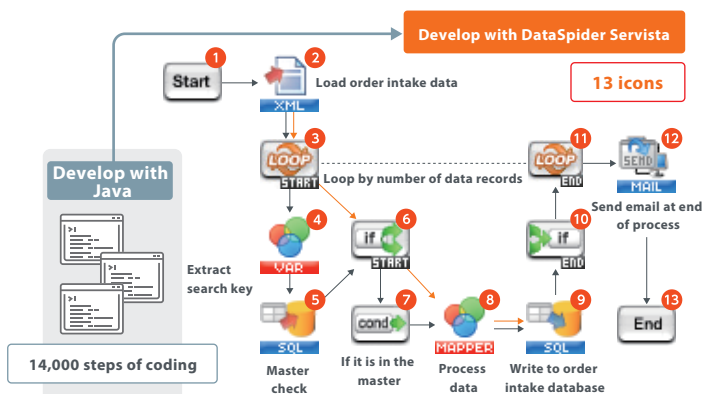
After After installing DataSpider

DataSpider Servista integrates each system to realize a shorter development time at lower cost



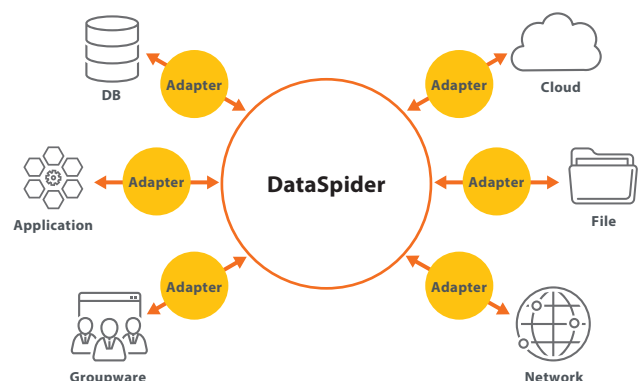
"Connection" without programming

14,000 steps of program code condensed into only 13 icons!



A variety of over 50 connection destinations

Without putting more work into existing systems, expand to different technologies and formats flexibly via connection adapters

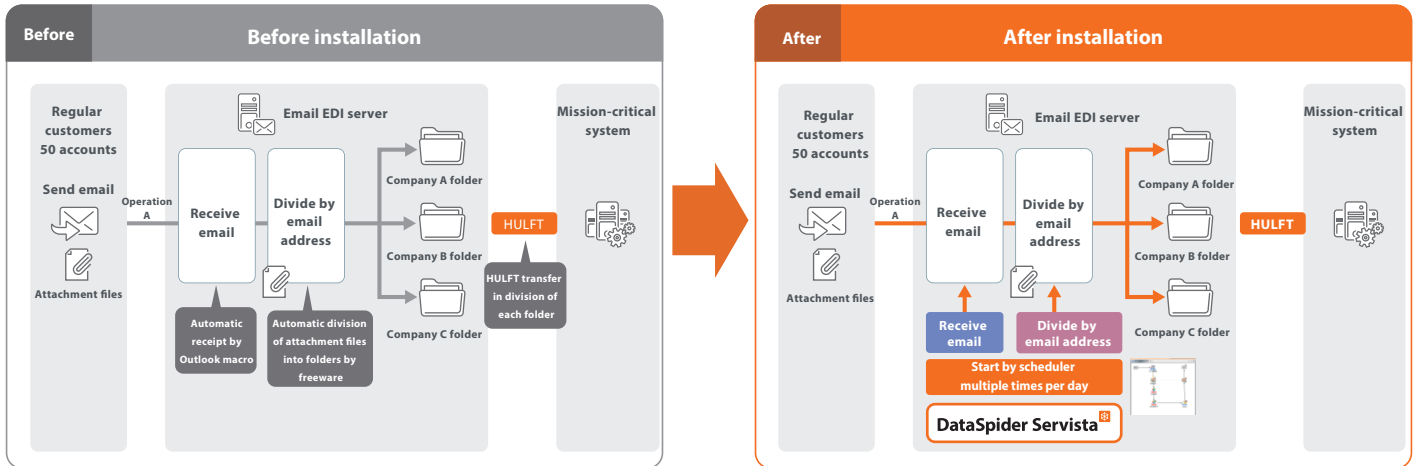


Data Integration

Use Case

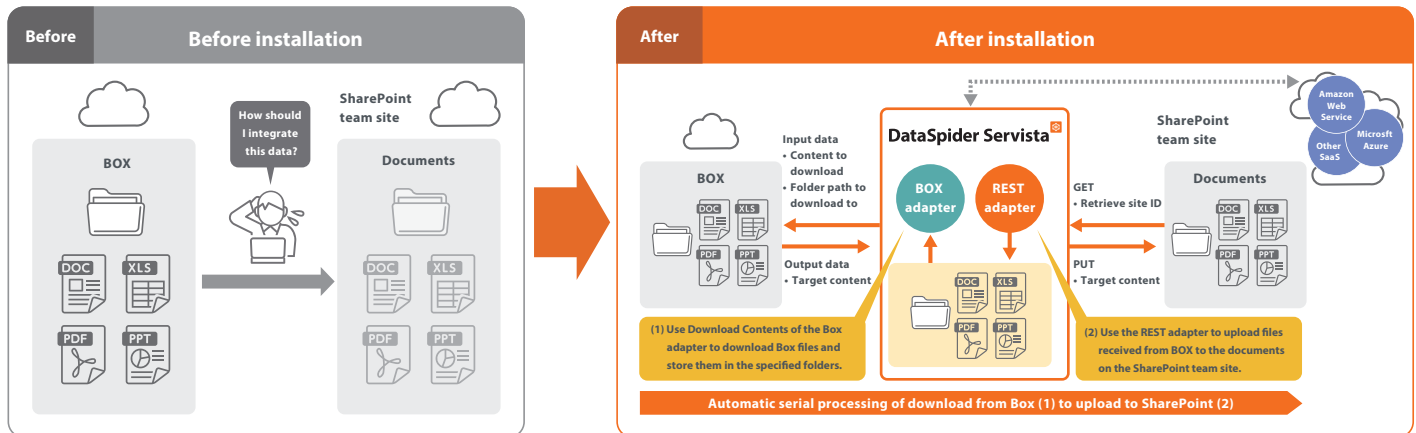
Use Case 01 Automate routine daily operations

You can automate repetitive manual operations, such as input of data from Excel files attached to emails to a management system, and devise ways to reduce work hours and shorten processing time.



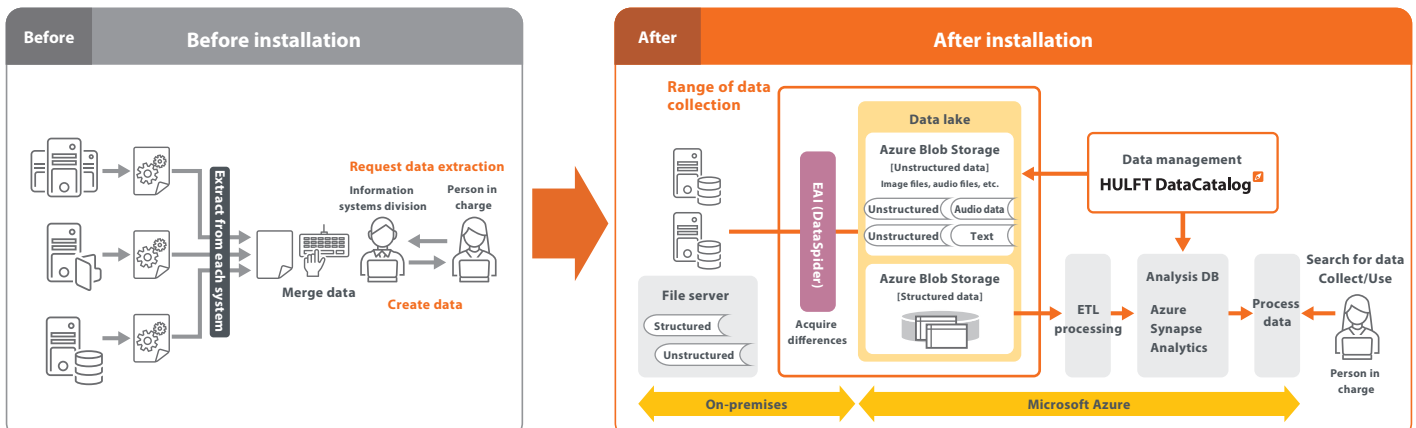
Use Case 02 Accelerate collaboration via integration with various clouds

Accelerate collaboration both in-house and with external sources by integrating speedily with cloud content management services such as Box and SharePoint.



Use Case 03 Collect dispersed data in-house and accelerate utilization of data

Collect data dispersed across systems such as mission-critical systems, business systems, and file servers and automatically integrate it into a data lake. Moreover, by integrating with the metadata management platform HULFT DataCatalog, you can accelerate the utilization of data.



Data Integration

Function Overview

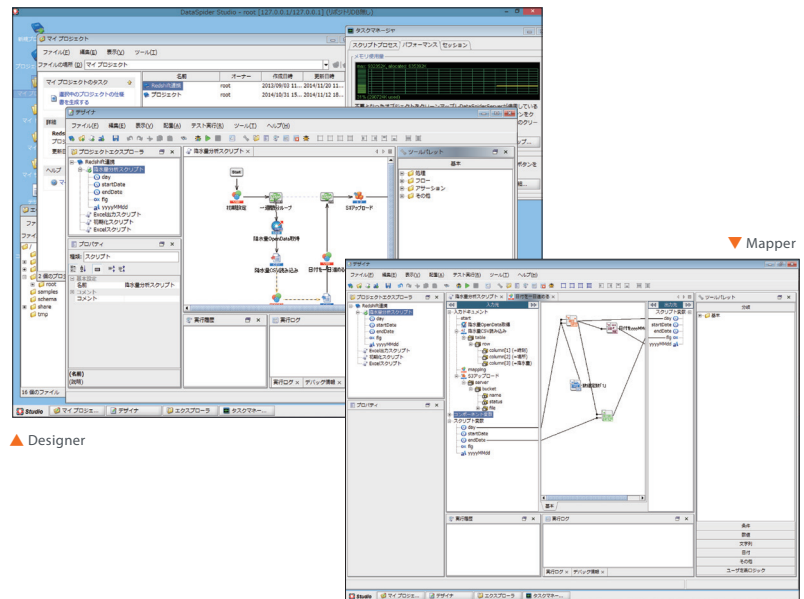
Development design tools "Designer" and "Mapper"

Designer: Tool to create a data integration process flow

In addition to adapters that input/output data from data sources and the Mapper for data process conversion, a multitude of processing icons that have various functions necessary for programming such as conditional branching, loop processing, and exception processing are provided. Use your mouse to drag and drop icons onto other icons and define the flow of processing. You can control operations in detail by setting the properties for each icon. Also, you can execute scripts created in Designer, perform debugging, and measure the performance of processing.

Mapper: Data integration and processing

This is a tool that defines character processing and code conversion. You can configure the settings for various types of conversion and processing of input data.

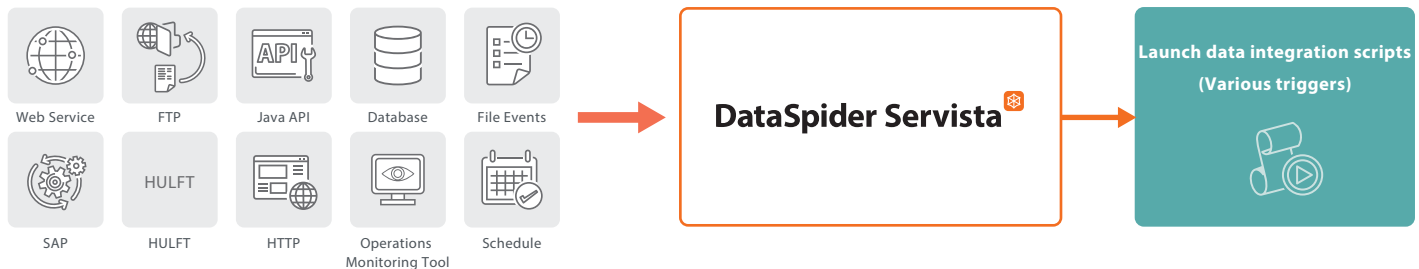


▲ Designer

▼ Mapper

Various triggers to control execution

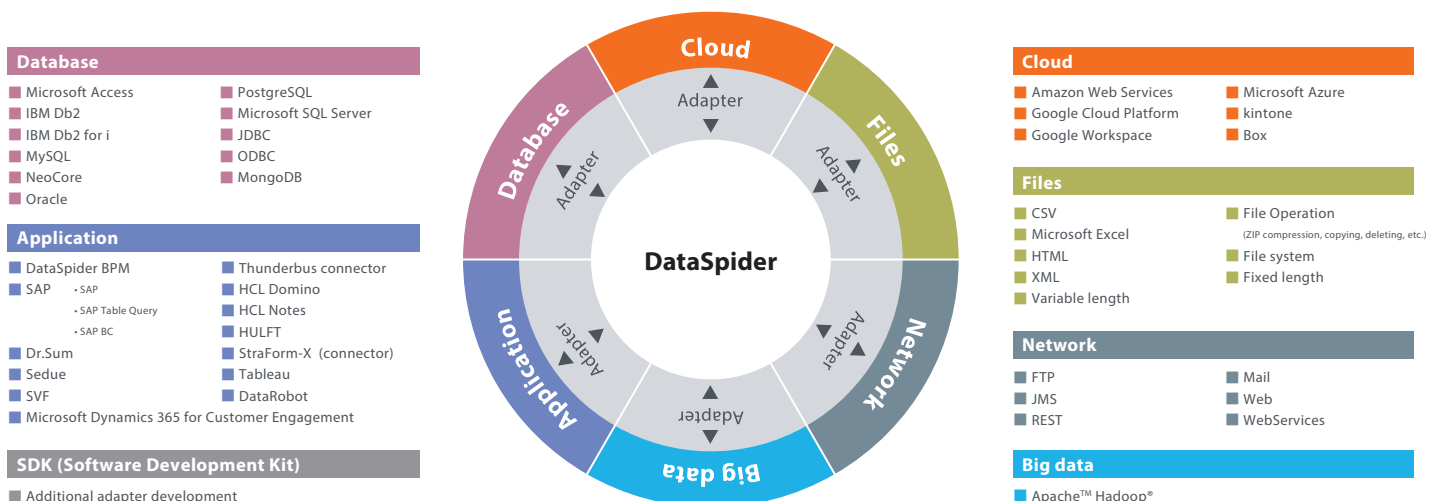
You can automatically launch data integration scripts created in DataSpider Servista at different times with the trigger function.



With an abundance of adapters and logic icons, you are free to extract/convert/process data the way you want

To automate data integration processing between systems, you need to "read and write data" and "convert data" in different formats and to "define a flow". DataSpider eliminates the complexity of how to "read and write data" and "convert data" for different types of "adapter" and enables you to easily "define a flow" that integrates diverse data sources without creating programs.

*List of adapters for DataSpider Servista (as of September 2022). Please see our website for the latest information.



Data Integration

Function Overview

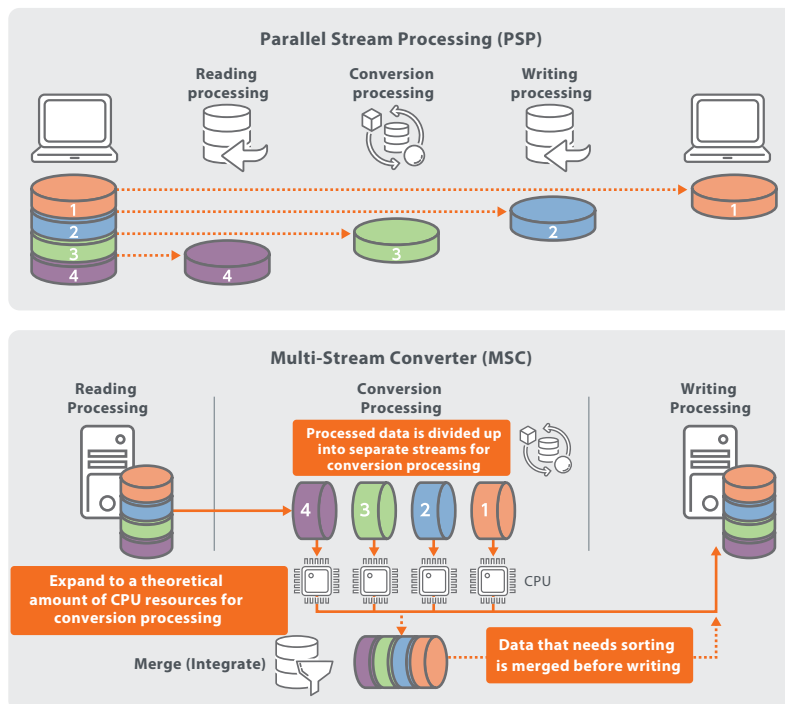
High-speed processing of large-volume data

■ Dramatically improve the performance of the data joining process

DataSpider Servista functions as a data integration hub that "connects/collects/retrieves" large-volume data in different formats used in various systems inside/outside of the company.

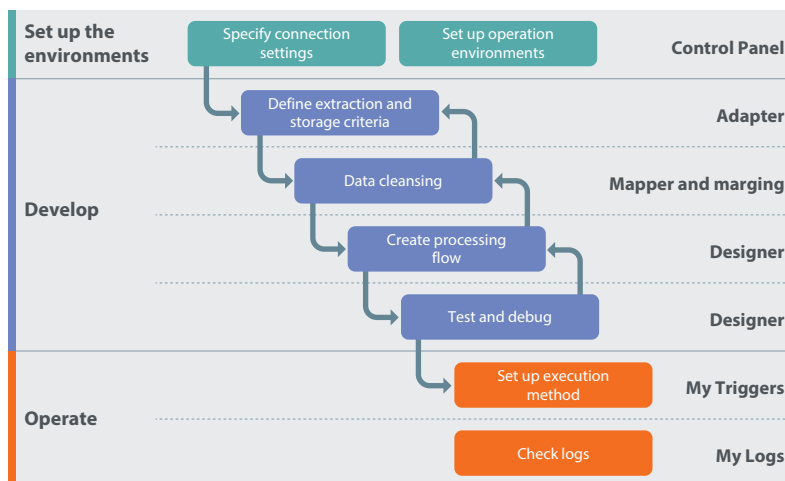
Integration processing created with DataSpider Servista is converted to Java. Therefore, you can achieve the coexistence of highly productive development via GUI with a performance capability that is comparable to development with Java.

You can process large-volume data at high speed with a parallel streaming function to divide up reading, converting, and writing for processing and "Multi-StreamConverter (MSC)", a dedicated engine that specialized in conversion processing for large-volume data.

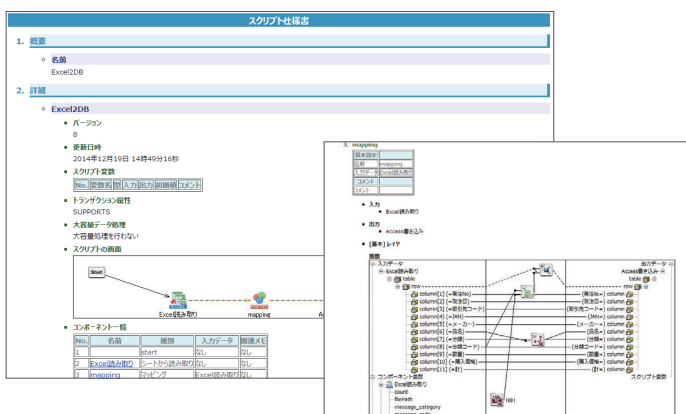


Powerful support for the development process, from design to operation

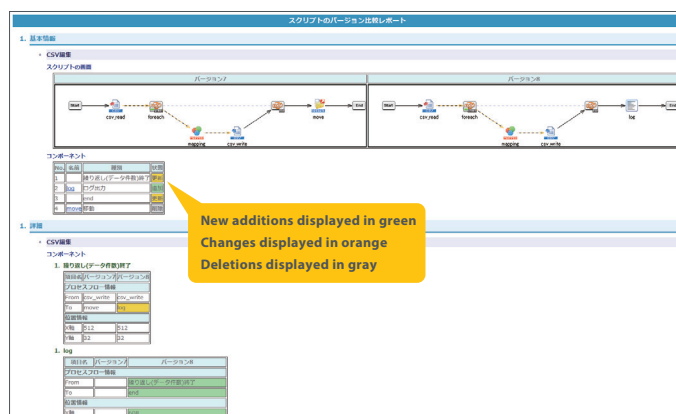
Development support functions along the process of design, implementation, testing, and operation reduce the burden on the developer. You can achieve improved productivity.



● Specification Document



● Version Comparison Report



Providing secure inter/intra-corporate managed file transfer (MFT) software

HULFT8

Assured
and
Reliable

Support
Multiple
Platforms

Centralized
and
Automated
Operation

Please see here for details



By using HULFT, a secure yet seamless file transfer of inter- and intra- corporation will be realized

HULFT is a file integration middleware that sends and receives data stored in IT systems, such as sales data produced by corporate activities, customer information, and log data. To enable you to use HULFT as the foundation for your business systems, it comes equipped with a variety of functions such as character code conversion and uses the industry standard TCP/IP protocol to reliably and securely send and deliver various files with different servers, platforms, coding systems, or so on.

Features

Feature 01 Compatible with multi-platforms

- Integrated control between different platforms

Feature 02 Compatible with various file formats

- Text, binary, and formats

Feature 03 Sending and receiving data

- Reduction of network load (compression, intermittent transfer)
- Measures taken for errors (checkpoint recovery)
- Absorption of differences in character codes between disparate platforms
- Various transfer modes (batch transfer, multicasting, etc.)

Feature 04 Strong security

- HULFT Cipher(s), AES/C4S Cipher(s)
- Checking for data loss and falsification
- Prevention of unauthorized access, operation log output

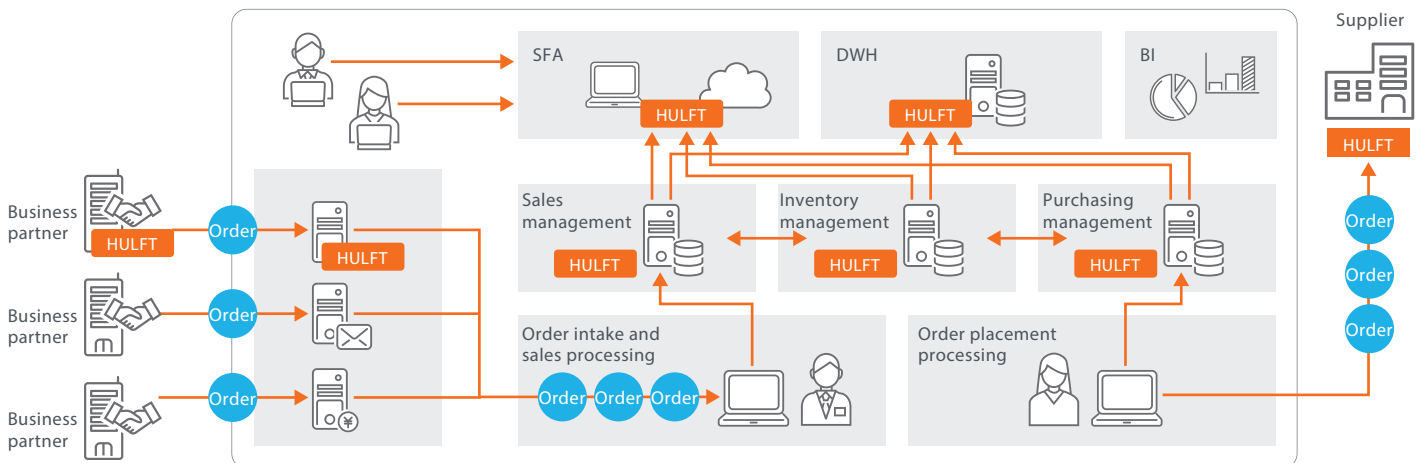
Feature 05 System Management

- Management of transfer log record(s), transfer information
- Remote centralized operation

Feature 06 Automation of operations

- Job startup with business processing

Use case of HULFT by sales companies



Comparison of HULFT8 versus FTP and Development from Scratch

HULFT is developed based on the concept of consolidating all of the processes necessary for file transfers into the settings for HULFT. With HULFT, the development from scratch that is required for FTP is not required, and you can achieve the automation of reliable and secure file transfers.

	Transfer request to file	File transfer processing	Transfer preference settings	Directory specification	File specification	Verification of file consistency	Compression/decompression	Encryption/decryption	Character code conversion	Output of send/receive logs	Linkage of transfer processing to jobs
HULFT											
HULFT Script	Handled by HULFT Script										Handled by HULFT Script
FTP		FTP									

Handled by development from scratch or other middleware (operation management tools, etc.)

Data Entry

Basic Functions

Reliable and secure file integration

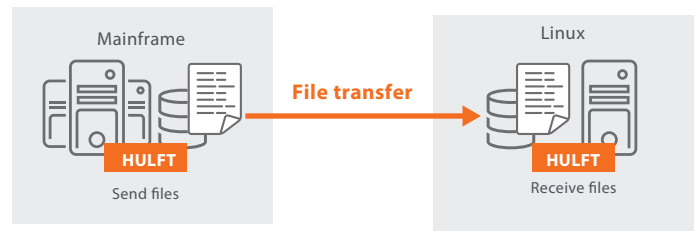
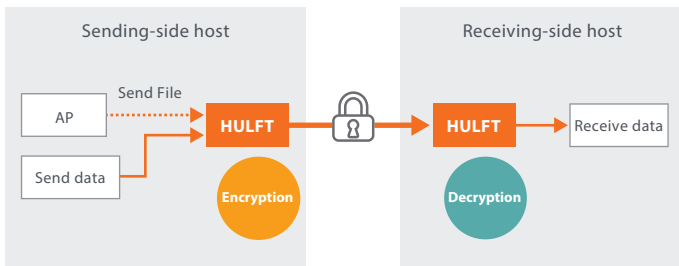
HULFT file integration is fundamentally performed one-on-one by two hosts. You can issue a request for this file integration either from the host on the sending side or from the host on the receiving side. Additionally, there are a large number of functions available, such as multicasting to transfer one file to multiple sites at the same time, compressed transfers/intermittent transfers that do not take up network resources, and checkpoints to retransfer from the point of an error when sending fails due to an error that occurs during transfer.

HULFT implements encrypted communication according to standard in order to reliably transfer the customer's data.

- **Prevention against interception, leakage, loss, and alteration of transfer data**

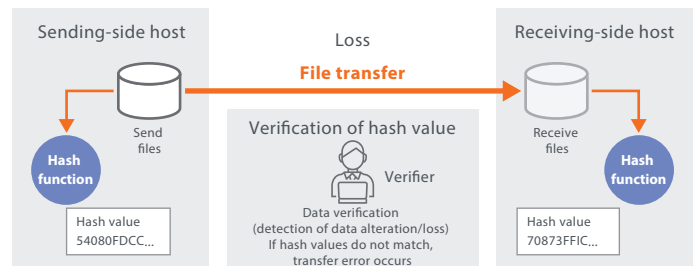
- **Utilization of unique encryption in secret key format**

- **HULFT Cipher (HULFT automatically encrypts and decrypts)**



- **Improvement in accuracy of data verification**

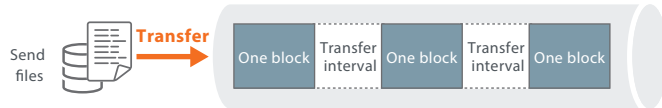
By creating hash values from the transfer data and verifying the data, the consistency between the data received in the file transfer and the data that was originally sent is verified. Data loss and alteration can be detected.



Sending and receiving data

- **Intermittent transfer**

You can specify a transfer interval to transfer data in one block units in the Send Management Information. This allows files to be transferred without occupying the network.



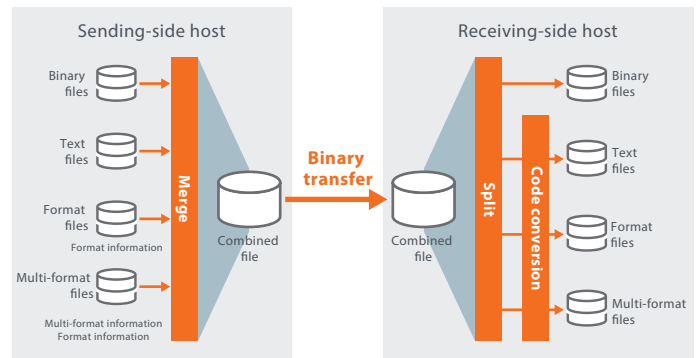
- **Compressed transfer**

Transfer data is compressed with a method that is specific to HULFT to perform efficient file transfers. You can select whether or not to compress each file in the Send Management Information.



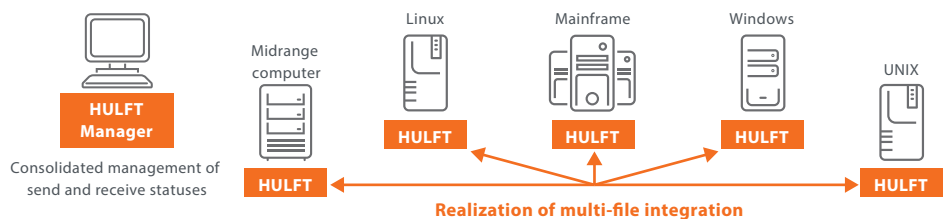
- **Batch transfer of multiple files**

Multiple files can be sent in one transfer process.



A wide range of supported operating systems and absorption of differences in a variety of character codes to achieve the standardization of inter/intra-corporate file integration

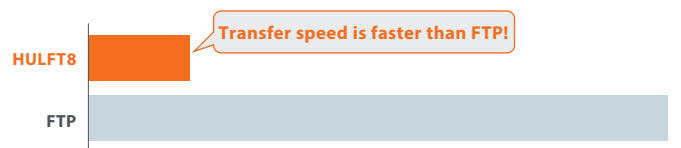
With a wide range of supported operating systems and absorption of differences in a variety of character codes, the standardization of inter/intra-corporate file integration is achieved. Various file types, such as text, binary, and format, are also supported.



Improved Performance

Realizing optimal file transfer for the cloud and big data, as well as the global era!

HULFT8 has focused on data compression to stably provide high-speed file transfer. In addition, by adding an automatic tuning function for transfer settings, it achieves a transfer speed which is overwhelmingly faster than FTP. Due to this, HULFT8 demonstrates a stable performance without any special tuning during remote transfer, transfers of large capacity files, and inter-cloud service transfers.



HULFT8
OPTION

HULFT

Simplified creation by GUI of
pre- and post- file transfer processing

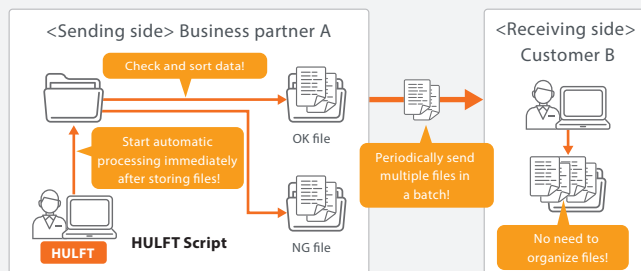
HULFT Script can be used to establish a data integration environment combining SFTP/FTP and HULFT

An SFTP/FTP function has been added to HULFT Script to cater to customers who wish to use FTP in some systems, and those who wish to shift from FTP to HULFT in phases. With this addition, it is now possible to link HULFT with SFTP/FTP.

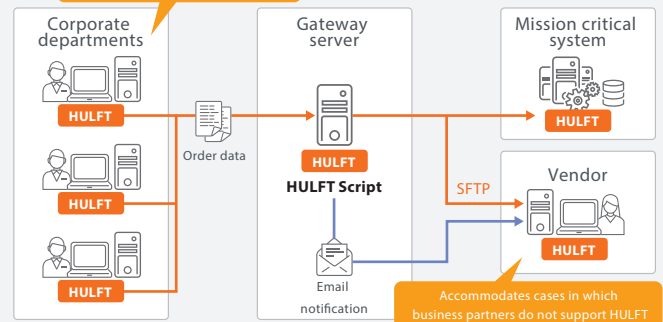
Features of HULFT Script

- Can be linked with SFTP/FTP servers without altering the HULFT environment.
- Compatible with Windows, Linux, zLinux, and UNIX.

Automatically send multiple files in a batch!



Can deploy HULFT in phases even in an environment that primarily uses FTP



Please see here for details (Japanese only)



Significantly reduce development man-hours by eliminating the need for programming!

- Eliminate the hassle of building pre- and post- file transfer processing
- Can be implemented quickly with templates
- Resolve the problem of individualization by generating specifications for created scripts

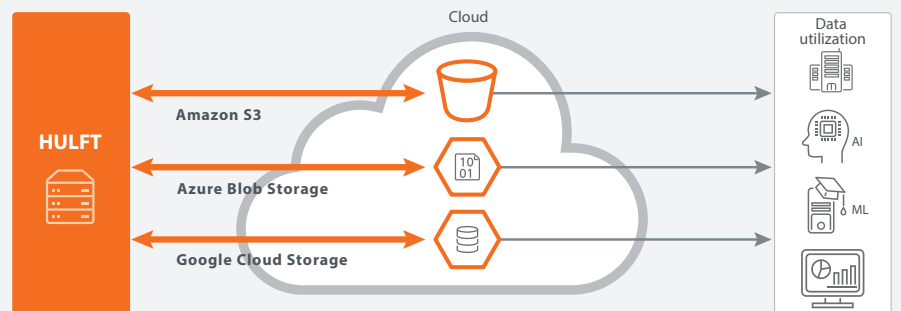
HULFT8
OPTION

HULFT

Cloud Storage Option

Realize data transfer/integration
between on-premises/the cloud simply,
reliably, and securely without coding

HULFT Cloud Storage Option is an optional product that enables you to realize direct file transfers to the cloud with HULFT. You can use existing HULFT settings/operations as-is to realize speedy cloud transfers.



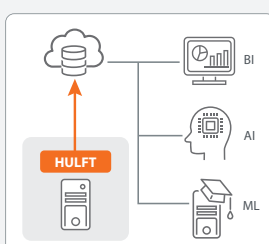
Please see here for details (Japanese only)



Use Case

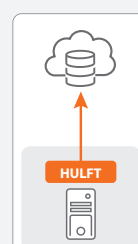
Use Case 01 Data utilization

Upload data to the cloud and collect dispersed in-house data in a data lake and use it for analysis



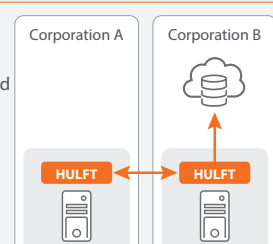
Use Case 02 Data migration/backup

Use for data migration to the cloud, backups to prepare for disasters, or multi-cloud distributed storage



Use Case 03 Data transfer between corporations

Integrate the data that must be stored for a specified period of time reliably and securely with an audit trail



Data Entry

Realize even greater optimization and automation of HULFT operation management

HULFT-HUB



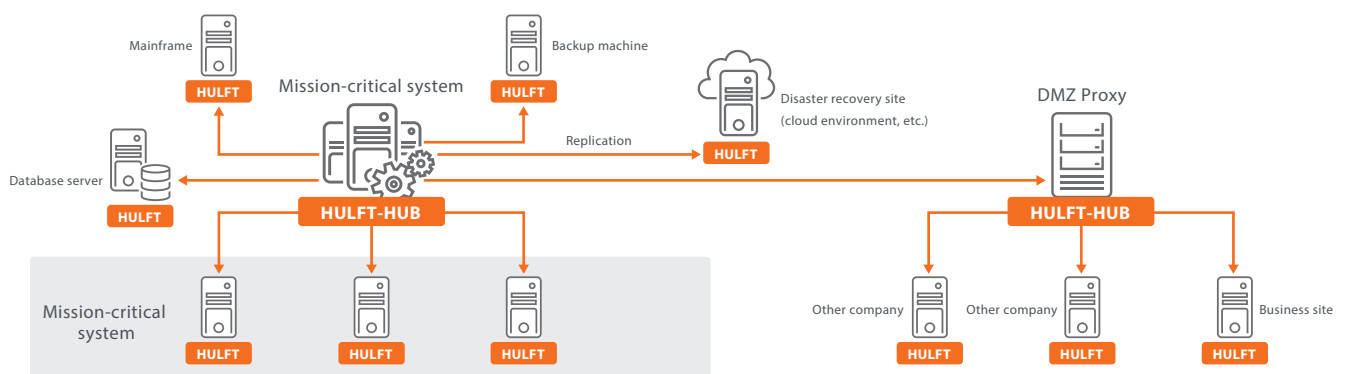
Please see here for details
(Japanese only)



Before you even realized it, had your number of HULFTs become quite large and difficult to manage/operate? By installing HULFT-HUB, data integration between HULFTs becomes easier, for the realization of a data integration solution that meets the customer's needs.

Features

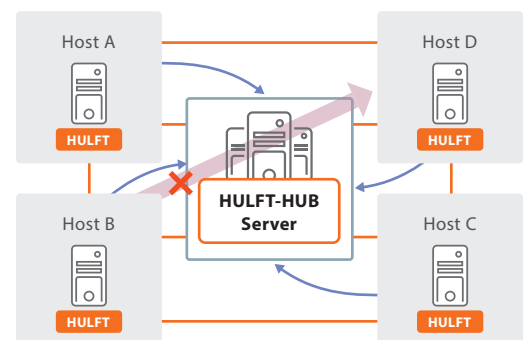
Feature 01	Visualization of operational status of HULFT	Feature 02	Strengthening of security for HULFT transfers	Feature 03	Transfer control for data storage	Feature 04	Automation of processing with job flows
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Use Case

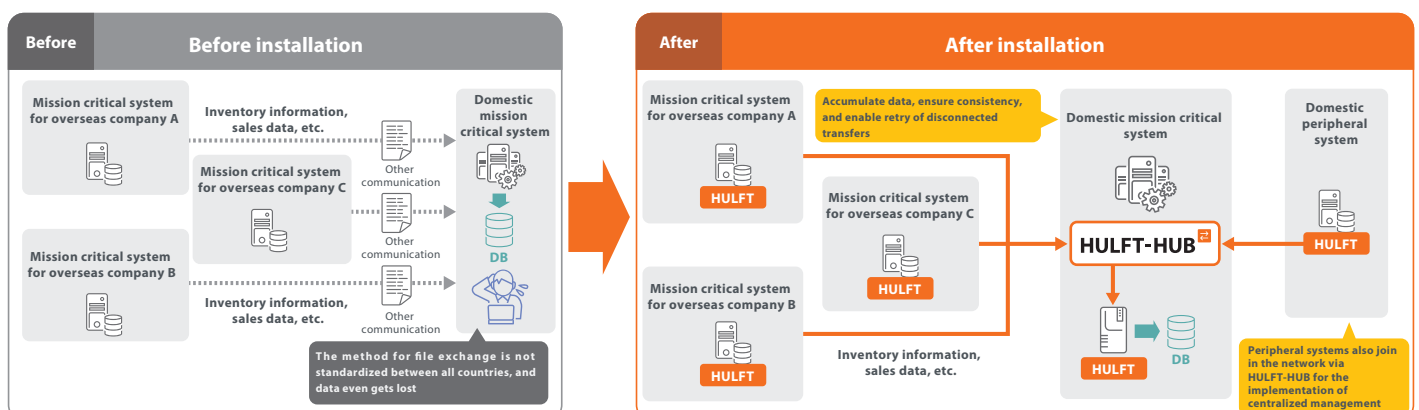
Use Case 01 Centralized control of HULFT

Because you can view the entire HULFT network in a centralized manner, you can understand quickly what is happening and where, and you can clarify the cause of errors and resolve them quickly if they occur.



Use Case 02 Absorption of changes to transfer schedule

When there are changes to the transfer schedule, such as for maintenance of communication lines, you can automatically store data to send in HULFT-HUB temporarily and then send it automatically when maintenance finishes. You can realize automatic operation for maintenance.



A reliable and secure file integration service that you can start easily via the Internet

HULFT-WebConnect



Please see here for details



HULFT-WebConnect is a SaaS-type relay service that enables easy and safe HULFT file transfers over the Internet. Internet connection is all that is required to use HULFT-WebConnect, and existing communication lines can be started using in a short timeframe.

Features

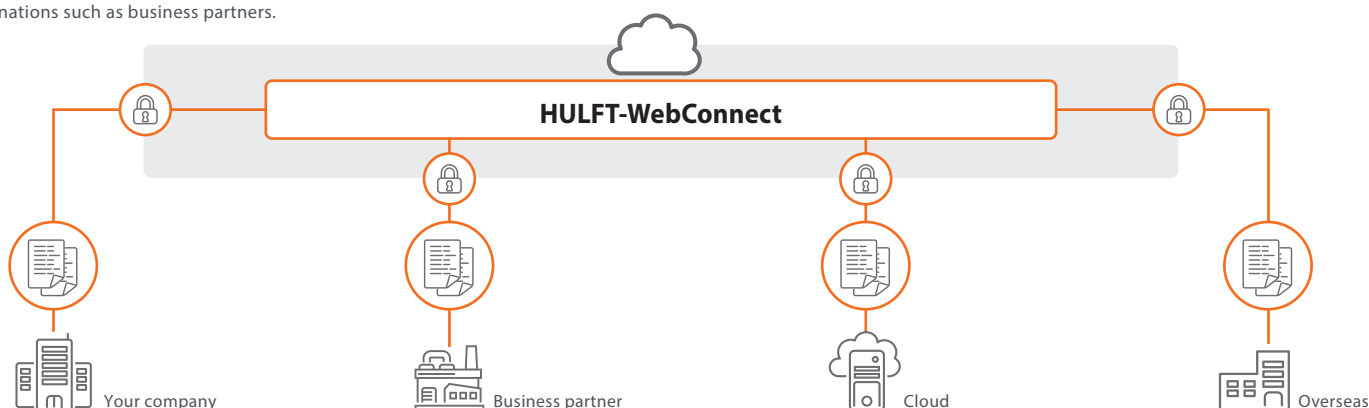
Feature 01 Quick and easy startup

Feature 02 Realization of reliable data integration even over the Internet

Feature 03 A variety of data transfer methods

Solve your data integration problems!

You can quickly and easily implement a data integration platform over a wide area via the Internet at low cost, such as "between remote sites of the company (between overseas business sites and the headquarters, etc.)", "between the company and business partners", and "for integration with cloud services". When you have an environment that can connect to the Internet, you do not need to install new dedicated lines or VPNs. You can also respond quickly to the addition of connection destinations such as business partners.



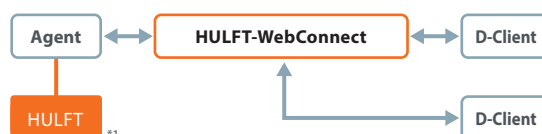
Four transfer formats for simplified integration with connection destinations

In HULFT-WebConnect, four transfer formats are available, which you can select from flexibly based on factors such as the environment of the connection destination and the skill of the person in charge. Even in situations where it is difficult to provide HULFT to both the sender and the receiver, you can connect easily and reliably.

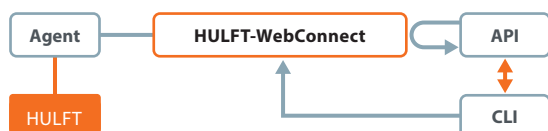
1 Agent Connect reliably and securely with HULFT



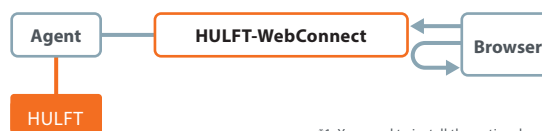
2 D-Client Connect reliably and securely without an IT manager



3 CLI/API Automate by integrating with applications/services



4 Web browser Connect easily even for irregular business



*1. You need to install the optional product for AES

Use Case

As a replacement for an ISDN line



Optimized transfer speeds even for long distance communication such as among overseas sites



Data Entry

Data processing & conversion tool

DataMagic

Please see here for details



DataMagic, which supports various types of coding and data formats, is a tool to implement at low cost the data conversion tasks required before and after file transfers with HULFT. By adding the database connection option, you can set various databases as input/output targets, and by combining with data conversion processing and HULFT, you can transfer records in various formats including databases as input/output targets.

Features

Feature 01 **Fast and flexible data processing**

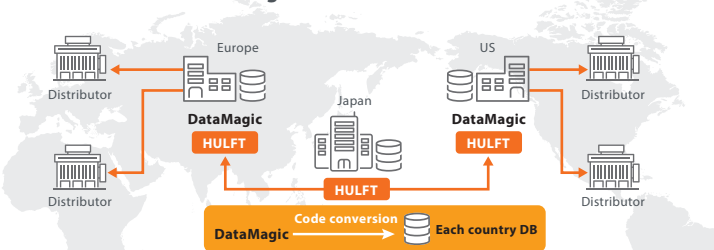
Feature 02 **Various types of codes and data conversion**

Feature 03 **Simple settings via GUI**

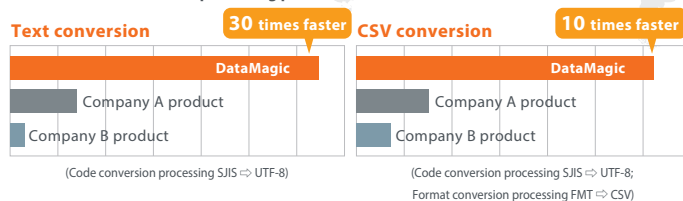
Feature 04 **Output of specification documents**

Use Case

Code conversion for integration between business sites



Overwhelming speed compared to other companies (Amount of conversion processing per second)



Realize various kinds of conversion! Support a wide range of code types and data formats

Convertible code types

[Kanji character code]	[Single-byte code]
SJIS	ASCII
EUC	Kana characters
JEF	ASPEN
KEIS	Lowercase
IBM	NEC kana characters
NEC kanji	IBM lowercase
UTF-16	IBM lowercase extended
UTF-8	
JIS	

Supported data formats

Input file	Output file
Fixed format	Fixed format
Multi-format	Multi-format
CSV	CSV
XML	XML
Hierarchy format	Hierarchy format
Database table	Database table
Excel file	Excel file
Text file	Text file

Function Overview

DataMagic provides powerful support for data processing: It is packed full with a host of the outstanding features that system engineers want, including the essential data processing functions - data extraction, item summation, layout conversion, and code conversion.

Character code



- SJIS
- EUC
- UTF-8
- UTF-16
- IBM
- NEC
- KEIS
- JEF
- JIS

Input/output



- Specification of extraction conditions
- Output location sorting
- Additional output
- Updated output

Computation



- Arithmetic operations
- Rounding
- Rounding up
- Rounding down
- Number of significant digits
- Signed output

Cleansing



- Full-width and half-width
- Western calendar and Japanese calendar
- Alignment to the right and alignment to the left

Matching



Refer to data from separate targets based on keys and integrate records

Merge



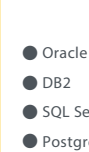
Integrate the data of multiple targets. Deletion of duplicate records is also possible.

Replacement



Replacement is available with flexible character string search via regular expressions

Database



- Oracle
- DB2
- SQL Server
- PostgreSQL
- ODBC
- Access
- FileMaker Pro
- FileMaker Server

Multi-user



Multiple users can develop conversion settings with the product at the same time

Specification documents



Output conversion logic to specification documents in Excel format and improve maintainability

Step execution



You can perform conversion processing development while checking the course of conversion

Switch between JP/EN



Switch the display language for the daily settings screen for users

Data Identification

A metadata management platform that gives you insight from data

HULFT DataCatalog

Please see here for details
(Japanese only)



Corporate data assets that keep increasing on a daily basis. HULFT DataCatalog collects and catalogs the information (metadata) for various kinds of data that is managed separately within a corporation. The visualization of location/history and the sharing of knowledge related to data make the searching of data more efficient and support your understanding of the "contents" of the data. Anyone can select data themselves, enabling them to perform business activities more freely.

Features

Feature
01

Search for the location of data by keyword

Automatically collect information for various kinds of data existing within a corporation. You can quickly locate the data you want from every different system.

Feature
02

Data dictionary for understanding terms and their meanings

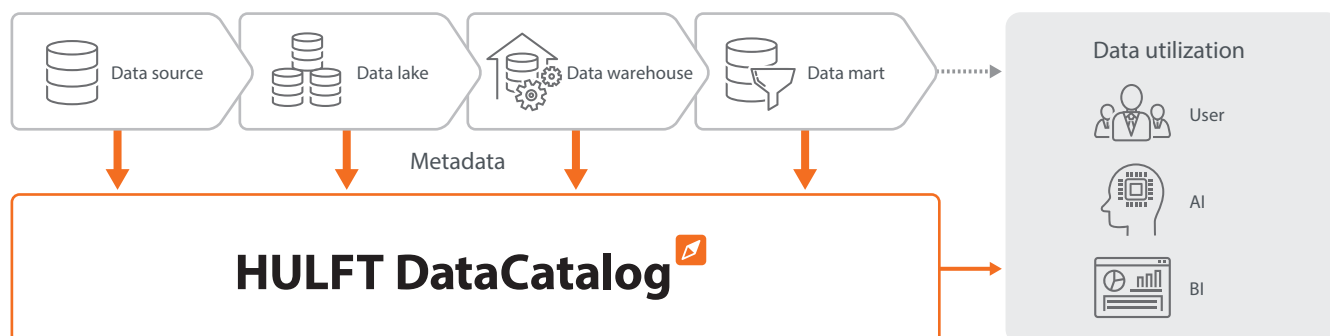
Prevent the misuse of data due to misunderstandings caused by non-standardized terminology. Search for data more easily with related terms.

Feature
03

Visualization of the history of data

Understanding the history of data helps you to determine whether data meets your needs and whether data is reliable.

In HULFT DataCatalog, like a web search, you can easily locate the data that you want. You can also understand the meaning and history of data and related terms, which turns the process of selecting "reliable data" into something you can do yourself. Moreover, by integrating with DataSpider, you can connect this smoothly into the utilization and analysis of the data you discover.



Function Overview

Search and collection of metadata

- A crawler automatically collects the information attached to various kinds of data (the metadata) existing within a company.
- You can search for the data you want from all of the data dispersed here and there within a company (search by synonyms, quasi-synonyms, and related terms is also available).
- Search results are sorted according to a relevance score, and the most probable data is displayed. Preview and download of search result data are also available.
- Confirmation of data quality as well as governance checks for personal information and confidential information are also simplified.



Data lineage

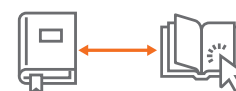
- Display a visual history of the target data (source, development, linkage source).
- You can understand intuitively from which system the target data was linked and to which systems it is connected.
- By understanding the history of data, you can grasp whether data meets your needs and whether data is reliable, in order to improve the accuracy of judgments based on that data.

*Data lineage is displayed if you use the combination of HULFT DataCatalog and DataSpider Servista.



Business glossary

- Standardize the terms used for business and their meanings. Link defined terms with data to prevent misuse of the data due to misunderstanding. Search for data more easily with related terms.
- The linkage of business terms and system terms creates a clear mutual understanding between the business division and the systems manager in relation to data.



Data enrichment (evaluation/tags/comments)

- Explanations for data and how to use it, points to be noted, and other such knowledge are shared with both data providers and data users so that all company employees can utilize data with the same information.

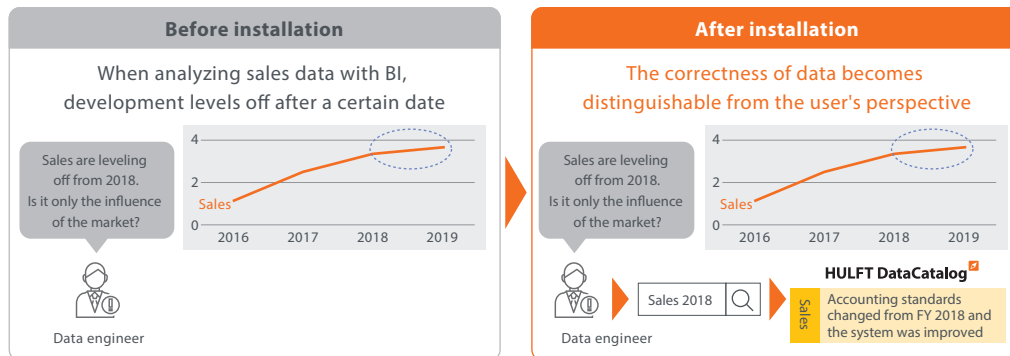


Data Identification

Use Case

Use Case 01 Planning with reliable data (corporate planning)

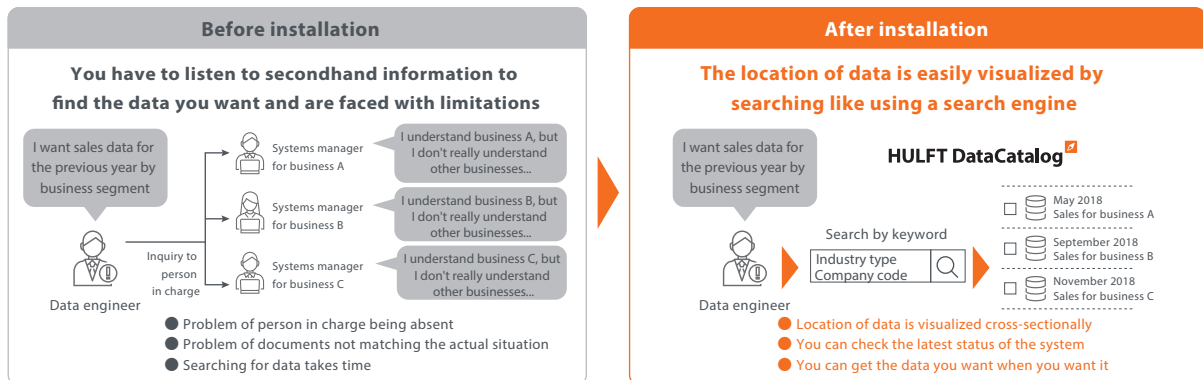
The analysis of past data is essential to the formulation of business plans for the next term. However, you need to have accurate data for that. By checking the history of data with HULFT DataCatalog, you can select the data you want out of similar data. Shortening of the data preparation period enables you to corporate management.



Share information related to data and eliminate individualization to make a system where anyone can utilize knowledge of data

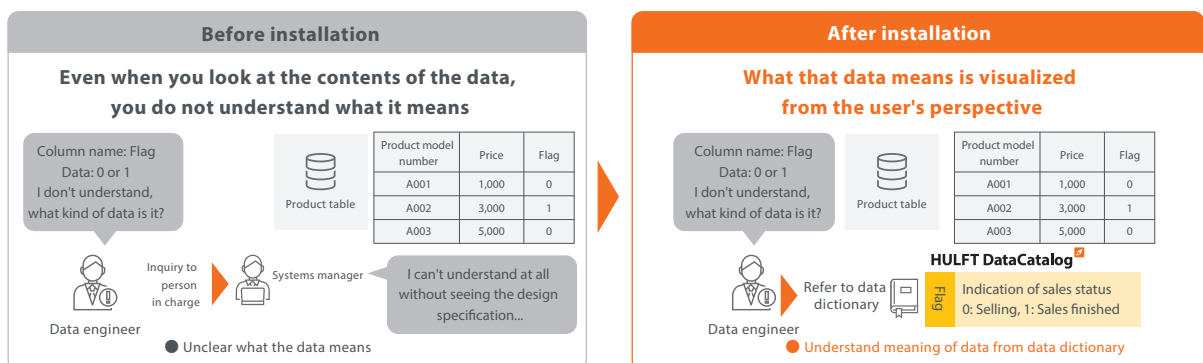
Use Case 02 Realization of self-service BI (LOB 1)

By installing HULFT DataCatalog, employees in the sales division and back office can locate the data they need themselves, which enables them to analyze and visualize it in Tableau and Excel (Power BI) or other BI tools. Making a request each time to the IT department is no longer necessary, and self-service BI is realized by LOB (on-site employees).



Use Case 03 Development of a glossary to prevent misinterpretation (LOB 2)

Bring attention to the meaning of each term itself to avoid communication loss due to the use of different business terms in each department/section. Link defined terms with data to understand the data correctly and prevent data selection errors due to misinterpretation.



Use Case 04 More rigorous management of confidential information/personal information (IT department)

By using HULFT DataCatalog, you can check on things such as whether confidential information/personal information is stored in locations that violate policy, and you can strengthen data governance and reduce the risk of information leaks.



HULFT DataCatalog



From installation to operation, complete support services are there to help.

HULFT technical support services

We provide you with a full range of support services including "Business Hours Only Technical Support Service" and "24/7/365 Support Service".



Business Hours Only Technical Support Service

Monday to Friday, 9:30 to 17:00 Japan time (JST)
(not including Saturdays, Sundays, holidays, and December 30 to January 3)



24/7/365 Support Service

24 hours/365 days

*For 24/7/365 Support Service, the support available on Monday to Friday (17:00 to 9:30), Saturdays, Sundays, holidays, and December 30 to January 3 (Japan time (JST)) is limited to product defects.

*If the failure of the product is caused by the customer's own error during use or other such reasons outside the scope of technical support, recovery and repair work will be charged separately.

Service details

1 Inquiry support (help desk support)

- Support for inquiries related to use of the product
- Repair assistance for product failures
- Provision of information related to the product

2 Latest product edition of the same version is provided free of charge

3 Information provided on a special technical support website

High quality support

We strive to improve the quality of our support based on various indications such as the resolution rate at the Level 1 technical support and the resolution rate by next business day.

Highest evaluation of 3 Stars received from HDI Benchmarking for Quality Service



*Source: HDI-Japan membership association, 2022 benchmarking, Quality Service division

Quality indication index



*Resolution rate at Level 1
technical support
March 2022 (HULFT8 products)



*Resolution rate by the
next business day
April 2022



*FY2022 questionnaire survey

Operating environment

We provide you with support services for our products running in the recommended operating environment (operating system, middleware, DB, Java, file system, communication environment, etc.) published by our company.

For the operating environment,
please see our website



<https://his.hulft.com/productinfo/opeenv/user>

HULFT

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