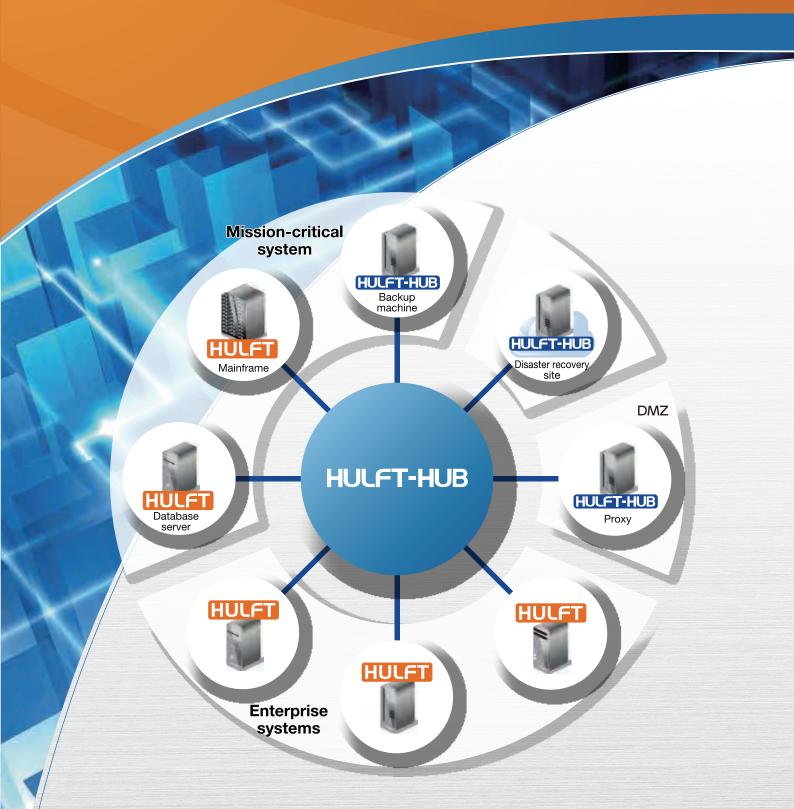
Further optimize and automate the operation management of HULFT!

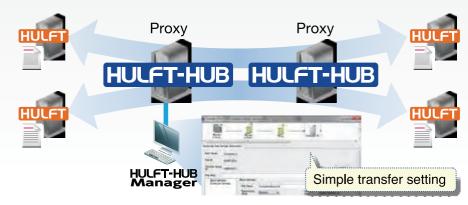
HULFT-HUB



Combine with HULFT to Create a Data Integration Solution Tailored to Customers' Needs

anagemen

4 Key Features of HULFT-HUB

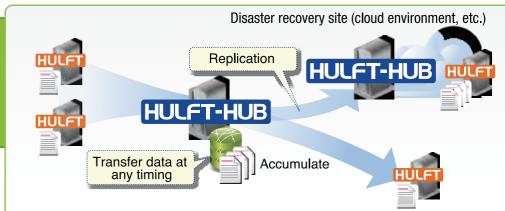


Relay without intermediate files!

With relay and multicasting functions that handle only communication storing no data on files, security has been enhanced for both transfer and operation management. This can be used as a HULFT transfer proxy.

Prevention of information leakage from DMZs and relay servers - Blocking and logging unauthorized communication Reduced load and improved performance

Accumulation

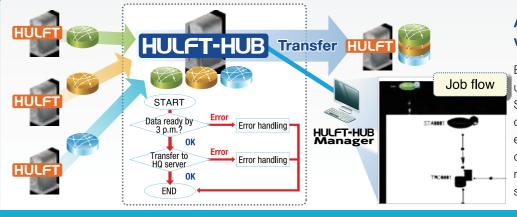


Accumulate and transfer data!

Relay files can be accumulated on the HUB server. This enables various control, such as temporary accumulation only when files cannot be transferred to the receiving side, and sending accumulated files in order.

Sequencing and prevention of duplicate transfer - Automatic resend upon detection of receive startup Capacity, generation, and deadline management

Processing

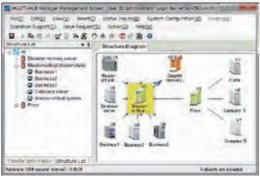


Automate processing with job flow!

Execution can be controlled using a pre-defined job flow. Supports branching based on the result of execution at each step, and in the event of an error, the job can be re-executed from a specified

- Automation of flow processing - Data waiting and processing - Monitoring of transfers scheduled for processing

HULFT-HUB Manager management screen



Transfer monitor screen



Visualize operational status of HULFT!

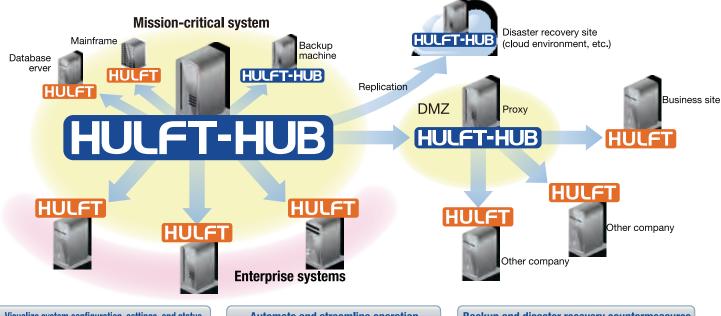
Configuration and operational status of individual HULFTs can be aggregated and centrally managed using **HULFT-HUB Manager** and utilities. Also enables batch setting of **HULFT** and operational labor saving.

- Operating HULFT status identification Storage/distribution of all HULFT settings Monitoring/displaying operational status of all HULFTs

Deploying HULFT-HUB Facilitates Data Integration between HULFTs!

HULFT and HULFT-HUB combined offer huge benefits!

HULFT-HUB enables centralized management of data transfer operations. Through integrated management of **HULFT**, it brings various benefits that facilitate operation by visualizing the configuration, operational status, settings, and data transfer of HULFTs that are distributed over the network.



Visualize system configuration, settings, and status

The environment, operational status, settings, and data transfer status of all **HULFT**s can be viewed on a management screen.

Automate and streamline operation

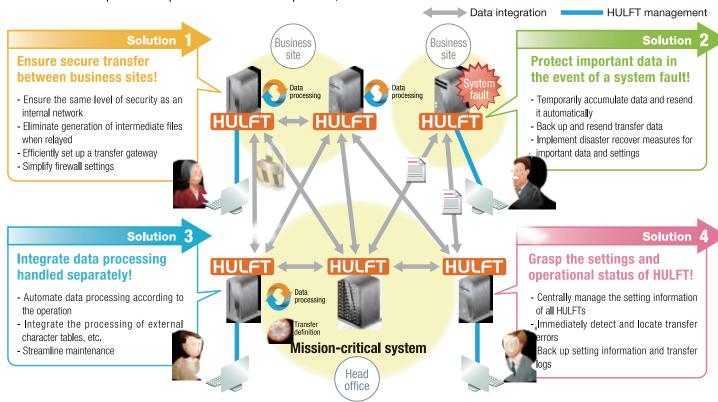
File transfer settings and operation are streamlined. Files can be received automatically according to the operational status of relay servers and **HULFT**.

Backup and disaster recovery countermeasures

Relay data is accumulated in case of a system fault and other incidents. HULFT-HUB will efficiently resend files according to the original transfer sequence and save important data to a disaster recovery site.

HULFT-HUB helps solve various issues that cannot be addressed with HULFT alone

The basic function of **HULFT**, which is designed for data integration between systems, is one-to-one transfer of files. As file transfer relationships are multiplied and become complicated, new issues will arise.



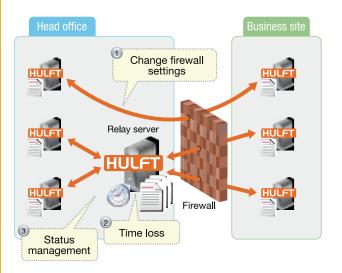
HULFT-HUB solves various system issues and creates new value utilizing **HULFT**.

Solution

Realize secure and speedy transfer

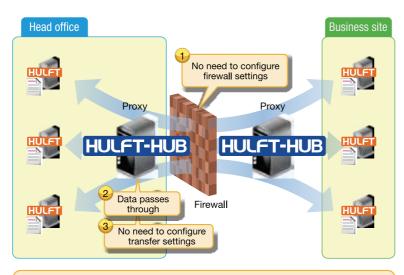
When communicating through a firewall, settings will need to be changed every time **HULFT** is installed on a new computer. Using **HULFT-HUB** as a proxy makes changing firewall and relay server settings unnecessary! The processing load, time loss, and risk of information leakage due to the generation of intermediate files will all be eliminated.

Operation with **HULFT**



- 1 Firewall settings need to be changed each time HULFT is added or reduced
- 2 Time required for transfer increases with the sending and receiving of files
- (3) Management of settings and status of transfer to a relay server by operation

Operation with **HULFT-HUB**



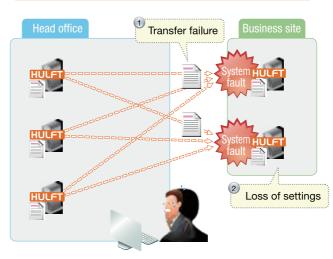
- Firewall settings not affected by a change in the number of HULFT installations!
- 2 Data passes through without generating intermediate files. The transfer time is also considerably reduced
- HULFT-HUB installed on a relay server requires neither transfer settings nor status management!

Solution 2

Protect data in the event of a fault or disaster, and support data receiving operation

When data cannot be sent to **HULFT** installed at a business site due to a system fault, **HULFT-HUB** will accumulate and protect the data. In addition, its replication function can serve as a simple disaster recovery measure. Resend control, which is activated when processing fails on the receiving side, is a very useful function even in normal operation.

Operation with **HULFT**



- A failure of data transfer due to a system fault will cause even the sending side to halt operation
- 2 HULFT settings and important data are lost because no backup is made

Disaster recovery site (cloud environment, etc.) Head office HULFT-HUB HULFT-HUB Business site Accumulate/resend Accumulate/resend

- Transfer data is accumulated on **HULFT-HUB** in the event of a system fault and quickly resent upon recovery!
- 2 HULFT settings and important data are backed up with a replication function!

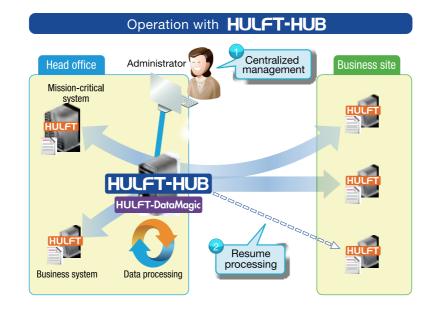
Solution 3

Integrate data processing handled separately

By integrating data processing handled at each business site on **HULFT-DataMagic**⁻¹, which is interfaced with **HULFT-HUB**, data processing can be centrally managed, and operation load can be reduced. Further, job flow can be used to automate processing, increasing work efficiency as a result.

Administrator Head office Mission-critical system HULFT Data processing Data processing Data processing Data processing Manual recovery

- Operation load increases due to data processing at each business site
- 2 Processing and transfer failure recovery are handled manually each time



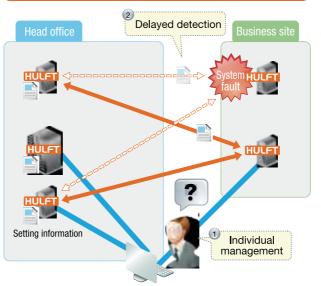
- Data processing is handled centrally in a bundle to dramatically reduce operation load!
- Processing is automated using job flow and can also be resumed!

Solution 4

Visualize the operational status to enhance operation efficiency

Through integrated management of the distributed **HULFT**, operation load can be significantly reduced. Further, any errors can be detected early and faults can be located promptly using **SIGNAlert**, which monitors the status of **HULFT**, thereby enhancing the security of data transfer.

Operation with **HULFT**



- No simple means to survey the entire network to identify any problem in individual data integration
- 2 System fault cannot be identified in real time

Hulft Hulft Notification Hulft Signalert Setting information Place System Hulft Rulft R

- The presence and status of **HULFT** are centrally managed in a bundle, reducing operation load!
- 2 Errors and faults can be instantly detected and identified, enabling quick response!

^{1:} HULFT-DataMagic is a tool for performing data conversion required in the course of work, including batch conversion of existing formats and extracting only necessary data and storing it in a database.

^{*2:} SIGNAlert is software for monitoring faults in applications, operating systems, hardware, and networks. It monitors the operational status of HULFT and notifies the administrator in the event of an error using the specified method

<Select from 2 grades>

HULFT-HUB Server is available in 2 grades: an "L grade," which is limited to HULFT integrated management functions, including the identification of file transfer status and batch change of settings, and an "ENT grade," which offers accumulation, job flow execution, and other advanced functions in addition to the HULFT integrated management function. Customers can choose a grade suited to their needs. For Windows, only the L grade is available.

Function					Overview/usage scenario	L grade	ENT grade
Relay		Relay			Passes through HULFT-HUB Server, and establishes a proxy gateway to each HULFT without storing any data on disk		
	Relay/multicasting of data transfer	Multicasting			Passes through HULFT-HUB Server, and controls server load and traffic through multicast data transfer to multiple sites		
		Communication encryption		cation encryption	In addition to encryption of data transfer between HULFTs, data transfer between HULFT-HUB Servers is also encrypted (HULFT encryption, C4S, AES)	_	
		0	Setting management, transfer error prevention		When files are not accumulated, HUB servers do not require a definition for each file ID. This eliminates the load of operation management and the risk of setting errors at the same time		
		Security	Management integration, permission control		HULFT-HUB serves as a proxy gateway for data communication, and it enables management and navigation of remote sites without altering the structure		
		Connection host authentication			Blocking and logging unauthorized communication by relaying only registered HULFTs		
		Accumulation method setting			Operation such as indicating whether accumulation is needed can be easily set just by selecting a processing mode. No need to think up unique file names to prevent overwriting	ta —	
Accumulation	Accumulation control and storage	Transfer sequencing			Controls the arrival of data from the sending side to the receiving side according to the data transfer start sequence. This sequence is replicated in controlling transfer even when resending multiple accumulated data. T his functions simply by specifying items that must not be overlaken when configuring accumulation settings.		•
		Accumulated data status management			Prevention of double transmission of the same data, number of transfers, and status control of accumulated data to enable resending of successfully transferred data		
	management	5			Generation management, capacity management, and storage period control to streamline management of accumulated data storage		
		Automation of recovery operation			A function that automatically sends data when it is detected that the destination is ready to receive Client hold for temporarily suspending transfer due to maintenance, etc., on the receiving side		
Processing	Process automation/ aggregation	Job flow		lob flow	Manages the execution of jobs on a HULT-HUB Server The job content and sequence of execution are defined by GUI and automatically executed according to the definition. A rerun function for resuming from the specified step		
				Scheduler	Use the calendar function to set a schedule and activate jobs according to the defined schedule	_	
		Trigger	Waiting for	Detection of file creation	Waiting for file generation to activate a job		•
				HULFT transfer file accumulation	Waiting for arrival of transfer files from HULFT to activate a job		
			event	Utility execution	A job is activated when an event notice is received from other jobs or the management tool of other jobs		
		Execu	rtion job	Transfer request to each HULFT	Execute requests (send requests) to transfer files from a HUB Server to each HULFT		
Management	System configuration management	Neighboring server configuration		server configuration	Even when using multiple HULFT-HUBs, the overall configuration, settings, and logs are centrally aggregated	_	
		Aggregation of the latest status of HULFT environment Configuration management, identification of environmental status			Management of the configuration of a HULFT environment that is actually operational, including the HULFT model, version, port number, etc.		
	Identification of	Identification of the operational status and machine environment of HULFT			Confirmation of the operational status of HULFT, server's host name and operating system information, and display with an optional server name, etc.		
	the state of HULFT	Identification of the license status of HULFT			Output of a list showing the versions, option information, and other license information of HULFTs under management		•
		Editing of management information			"Transfer Information Screen," a GUI screen where each HULFT's send and receive management information can be batch configured without inconsistency		
	Management of HULFT and	Batch operation of management information			The full management information of all HULFTs is output to a CSV file via a GUI screen or command		
	HULFT-HUB				Management information is batch registered, changed, or deleted for a number of HULFTs from a CSV file, via a GUI screen or command		
	settings				Past management information is automatically stored by generation, and the information can be referenced or restored according to the type, host name, and backup date		
					Each HULFT and HULFT-HUB server's system operation environment settings can be referenced or changed		
	Transfer status and transfer log	Inquiry of sending and receiving status and transfer results			Instead of just HULFT-HUB servers, each HULFT's transfer status and transfer results are centrally displayed and can also be output in CSV format		
	management	Automatic log backup			Daily log backup is performed automatically, transfer logs can be output in CSV format, and data is stored by generation		
	Security	User authentication			Single sign-on to each management HULFT by users with operation permission		
		Access permission setting management for each operation			User access management by host file for each operation group		
		Output operation log			Output a log of evidence of HULFT transfer requests and management information operation, such as "who did what, when, and where"		
Availability		HA cluster support			Support high-availability-type cluster environment and increase availability		
	Fault tolerance,	Alternative function			Replication that realizes successive synchronization of accumulated data		
	disaster				Periodic synchronization and replication of management information		•
	countermeasures				Successive synchronization and replication of transfer logs		
					Synchronization interval and other settings can be changed and cancelled dynamically		

For details on supported environment, please visit http://www.hulft.com/en/

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