

Technical white paper

Case Exchange Service

An HP adapter that acts as a bridge between Client and HP service desk systems.



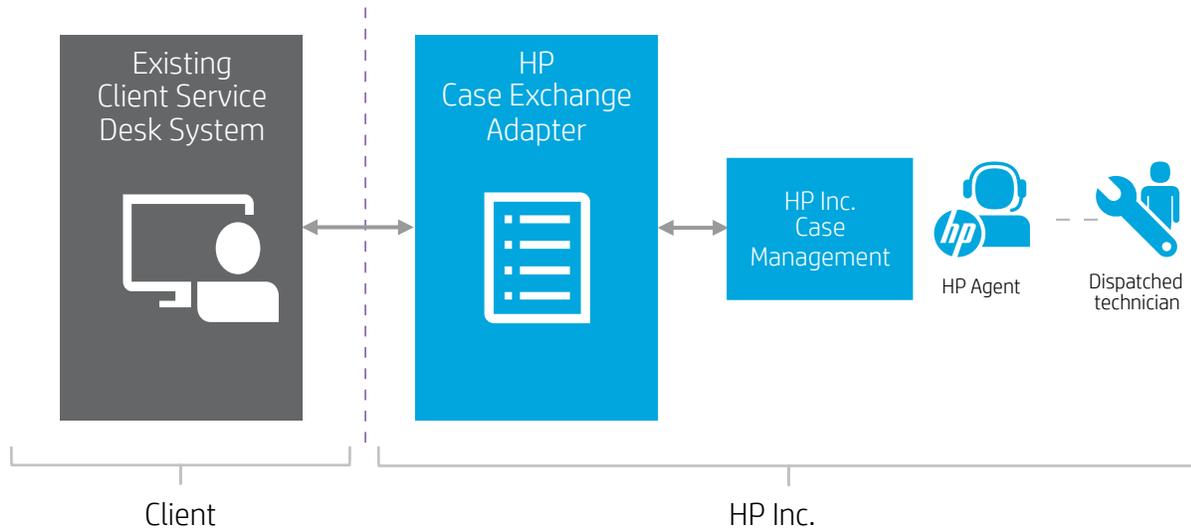
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Overview

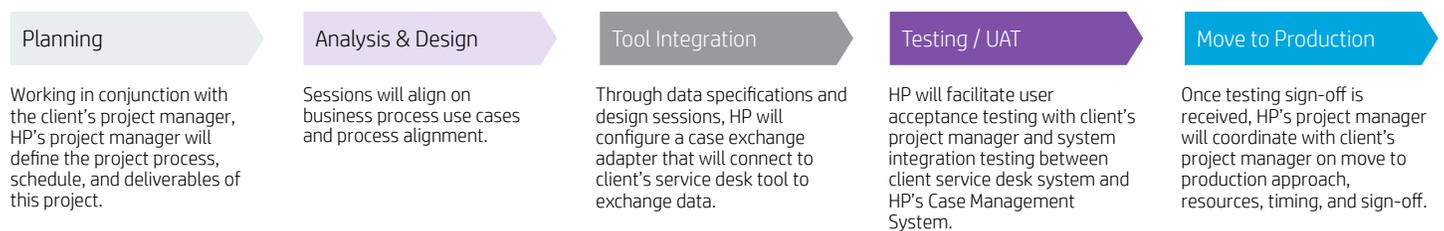
We have a proven methodology with a leading software solution to perform case exchange between a client's service desk system and HP's ecosystem. HP's Case Exchange Adapter ("adapter") is an integration tool that exists in HP's infrastructure. The adapter acts as a bridge between the client and HP, routing and translating data to and from each service desk system.

The client service desk system will not be connected directly to the HP ticketing system, but to this adapter, which resides in the middle. Support service incident ticket events will flow from the client ticketing system to HP and vice versa in an automated, transparent way for both sides. The adapter will translate the received data from one side and send it to the other side - managing data asynchronously and triggering alerts to both parties when errors occur.



Project Approach

As every client's environment is configured a little differently, we always assume a technical discussion is necessary with the client so that we can determine if it will be a simple integration (e.g. some field mapping) or something more complex (e.g. customization). To ensure quality, joint client/HP testing will be necessary. More complex integrations will have higher costs and longer timelines.



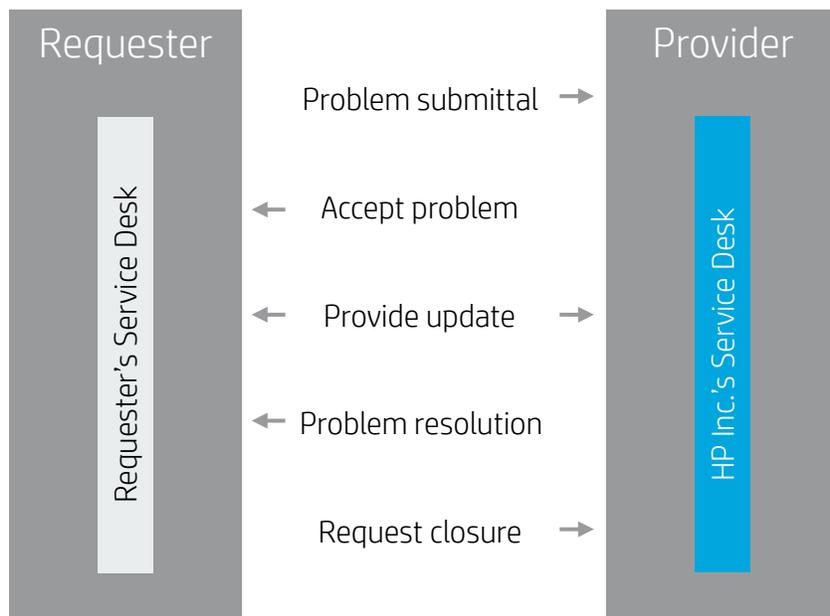
Project Documentation

The following are deliverables that generally created during each project.

- Project Schedule – MS-project format with the timeline for the project and in accordance with project delivery methodology
- Data Configuration Spec – overview of message exchanges between systems and detailed data mapping for each message
- Interface Architecture Diagram – high-level diagram depicting systems, data interfaces and HW/ SW components
- Technical Support Model – overview of processes and SLA for technical support

Standard Case Exchange Business Process

The following is a typical example of case exchange messages that transmitted/received between systems. The data configuration specifications include this data flow and detailed data mapping for each message.



Note that the adapter works with transactions which are typically triggered by a status change on either the client side or the HP side.

Problem Submittal

The problem submittal transaction sends the client (requester) ticket to the HP system (provider). The data associated with this transaction will be used to create a service request in HP's system and notify appropriate HP parties (e.g. dispatchers, engineers).

Upon receipt of the transaction, the HP Case Exchange Adapter will do a preliminary data check to ensure all mandatory fields are present. If this preliminary data check passes, the transaction will be sent to HP's Service Desk where additional data rules will be enforced. Upon successful creation of the service request in HP's systems, the HP system will send back an accept problem transaction. If anything fails along the way, an error transaction will be sent instead.

During the problem submittal phase, the ticket does not exist in HP's Service Desk.

Accept Problem

This transaction indicates that the ticket was successfully created in HP's Service Desk and that the service request is now in the "open" phase. The accept problem transaction will provide additional data to the client including HP's internal ticket number which will be used to reference all future transactions and interactions regarding this service request.

Provide Update

The provide update transaction is used by either party to provide additional information on a ticket. When initiated from the HP side, the transaction will communicate new text information in the form of notes and/or a change in the commit date/time.

When initiated from the client side, the transaction will only provide new text information. This transaction is not intended to be used to close a case (see below). The transaction will not change the status of a service request in the HP system.

Problem Resolution

The problem resolution transaction is sent by HP when the provider has completed the work on the service request is completed. At this point, a pro forma "confirm close" is automatically sent to HP's service desk system behind the scenes. The client system does not need to officially confirm the closure.

Request Closure

The request closure transaction is sent by the client and is equivalent to the client cancelling the service request. Notes may accompany this transaction. Upon receipt of the transaction, the HP system will automatically close the service request and no further transactions will be accepted for the request.

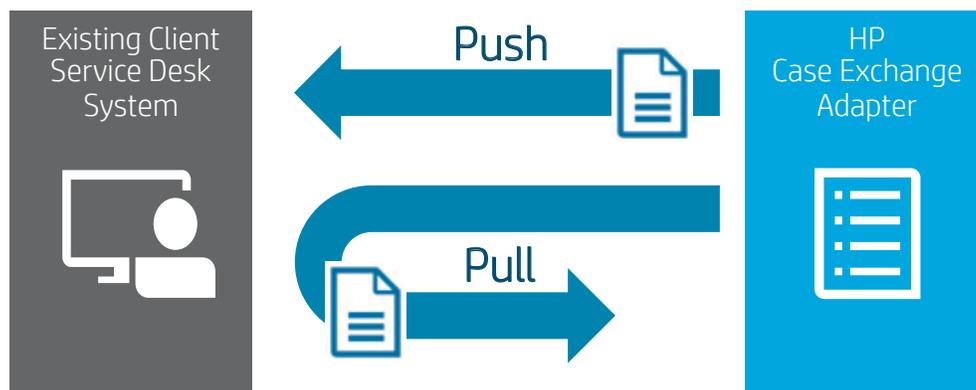
Solution Architecture

The client will not be connected directly to the HP ticketing system, but to HP's Case Exchange Adapter ("adapter") in the middle. Incident ticket events will flow from the client ticketing system to HP and vice versa in an automated, transparent way for both sides. The adapter will translate the received data from one side and send it to the other side.

In order to connect and translate the data, the adapter needs to be customized for each client, and the client interface may need to be adapted to interface with HP.

How it Works

The HP Case Exchange Adapter is designed with a push/pull protocol as demonstrated below.



In this architecture, a web service is published by the client to be used by HP. HP will "push" updates to the client service and HP will "pull" requests periodically from the client service.

The public internet provides a simple and commonly used standard to exchange data. Using HTTPS is the preferred way to connect. Additional protocols and additional security methods (VPN/IPSec) may be considered but would require more effort and time in implementation.

Message formats:

- Preferred: SOAP / XML
- Valid: REST protocol using either XML or JSON
- Other protocols or proprietary formats could be considered, but would require more effort and time

Message Standards:

- Encoding: The standard encoding of transferred messages is UTF-8
- Date Format: The HP Case Exchange Adapter prefers to use the ISO 8601 standard with all dates translated to UTC. This preferred format is: YYYY-MM-DDTHH:MI:SSZ (e.g. 2016-10-31T22:30:00Z)
- Country Standards: Global partners should provide any country data using the ISO 3166-1 Alpha 2 country code specification

At this time, the Case Exchange Adapter does not transfer messages real time or handle message attachments.

Project Prerequisite Considerations

The following are prerequisite conditions that a client should consider before engaging.

Should have

- **Resources:** PM, architect, service desk/business process SME (business analyst), service desk developer and Test resources
- **Interlock:** Alignment with customer's internal teams (i.e. IT, business, executive management) necessary to carry out the project
- **Environments:** Development, Test, Production
- **Functioning Service Desk System:** Case Exchange Integration should not be undertaken concurrently with a client's new system implementation or upgrade to an existing systems

Good to have

- **Design Documents:** Data mapping, business process/use cases, interface architecture diagram, test cases, etc.
- **Sample data:** supports design and testing.

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