



# Data Center Onboarding Guide

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## Document Revision History

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<b>Description of Change</b>	<b>Page</b>	<b>Date Revised</b>	<b>Reviser</b>
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## Introduction

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Since the 1960s the state of Washington has grown its information technology infrastructure in support of state business operations. Over this span of time, many data centers were opened across Thurston County. During the 2009 legislative session [ESHB 1216](#) gave DIS the authority to “lease develop or lease purchase a state data center and an office building,” with the intent to begin consolidations. On July 15, 2011 construction of a new State Data Center was completed. The state’s information technology agencies began moving into the adjoined office building and took possession of the State Data Center (SDC) building. In July 2013 the OCIO published the [State Data Center \(SDC\) Plan Update](#) outlining a strategy to migrate 100% of computing hardware in OB2 to the SDC and to develop a plan for migrating the remaining Thurston County data centers.

Consolidation of data centers is not unique to the state of Washington. Some of the key business considerations that typically drive data center migrations include:

1. Multiple regional data centers lack standardization, efficiencies and capacity for growth and are unable to meet end-to-end service level objectives. (Chawla, 2011)
2. Trends for data center growth are rising at compounding rates. Server workloads and densities are projected to increase by 10% year-over-year. Network bandwidth capacity demands are expected to grow by 35% , storage capacity growth by 50% and power costs are expected to increase by 20%, year-over-year. (Gartner, 2014)
3. Existing data center has obsolete infrastructure in terms of high power consumption, space taxing, unsupported equipment with poor availability/performance which does not integrate well with modern applications and technologies.
4. Current data center floor space is nearly 100% utilized, needs optimization to enable growth capabilities.
5. Regulatory requirements drive a need for relocation or redundancy.

Data center migrations are highly strategic projects that must be executed without impacting business operations, service levels, or data protection requirements.

Each Customer environment is unique and will have its own challenges. One detailed migration strategy will not fit every environment. However, every solid migration strategy should aim for a near-zero disruption of business services. This objective drives the need to understand all the major subsystems of a data center which include:

- Nature and criticality of the applications that cater to different business services
- Servers, shared hosting environments, and databases that host the applications or business logic
- Disk storage for storing data and the frequency of access
- Networks that provide the access to the data
- Network security that protects the business data
- Physical security of the environment
- Performance and service level agreements

In 2014, the State formed a relationship with a data center provider in eastern Washington and began the working on a project to enable offering disaster recovery colocation services. In 2015 the first set of Customers migrated equipment into the site.

## Purpose of this Guide

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The purpose of this Data Center Onboarding Guide is to define the steps that WaTech and/or Customers of [WaTech Colocation Services](#) will take to prepare for and complete the onboarding of systems into Colocation Olympia and/or Colocation Quincy.

Each Customer migrating systems into a WaTech data center is asked to identify an Agency Lead to serve as the primary Customer contact. While the Lead is not expected to be an expert in all areas, the Lead is responsible for coordinating the activities identified as Customer responsibility.

The activities are summarized in a checklist that will be used to track progress throughout the onboarding process. Completion of these activities is critical to onboarding success and will help to minimize any unplanned service disruption. When all readiness tasks are complete, the Customer Lead will submit the completed checklist to the WaTech Project Manager. The WaTech team will review and either a) confirm readiness or b) return the checklist for further work. After readiness is confirmed, onboarding work and related activities may begin.

Throughout the onboarding process, WaTech teams will need to manage many independent, yet concurrent, activities. These will need to be coordinated to look for interdependencies, conflicts, and ensure resource availability.

## Document Structure

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As agencies progress through the Guide, they will see prerequisite tasks that:

- must be completed internally by the Customer agency
- must be completed by WaTech staff
- must be completed in coordination with WaTech

Each task is prefaced with a table entry that identifies the primary party responsible for completing the work activity, the task number, and the task description. The table below provides a brief sample:

Party	#	Task Description
Both	1	<a href="#">Initiate Onboarding Planning</a>

Each table entry will be followed by a more detailed description of the work to be accomplished for that task. Onboarding tasks have been organized in a general chronological order.

Note: All onboarding tasks have been built to include a wide range of scenarios and not all tasks apply to every onboarding event. These tasks will be clarified with the appropriate parties during the planning phase.

## Assumptions

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This Guide makes the following assumptions:

1. WaTech has:
  - readied the facility
  - installed equipment enclosures
  - installed the cabling outside the enclosures
  - prepared the network core
2. Customers will avoid (as much as possible) the transformation of existing systems to a new technology base. Simplifying onboarding events helps to ensure the objectives and timeframes of onboarding schedules can be met. Reducing transformation is desirable to ensure that systems that were operational prior to an onboarding remain so afterward. If issues arise after onboarding is performed, it is much easier and effective to troubleshoot against known, working configurations. Configuration freezes should be discussed as part of preparations.

## Data Center Onboarding Tasks

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Based on WaTech's experience onboarding systems and services into the data centers, key activities have been identified and fall into these broad categories:

- Identify business requirements
- Analyze and design infrastructure and application
- Identify onboarding options and plan
- Build infrastructure and roll-out applications
- Verify applications
- Decommission source data center infrastructure (when applicable)

The equipment that will need to be installed into the data center to support onboarding will be a combination of equipment managed by WaTech and equipment owned and managed by Customer. Many of the tasks performed to support onboarding will be performed by the Customer in collaboration with WaTech Project Manager.

<b>60-120 DAYS BEFORE ONBOARDING</b>		
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Both	1	<b>Initiate Onboarding Planning</b>
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Discussions regarding onboarding into a data center are likely to evolve from a variety of circumstances. Customers who express interest to WaTech staff will be asked to contact the Service Desk to initiate formal planning. If WaTech has not heard from a Customer that needs to migrate (such as a Customer in an existing aging data center identified by the OCIO for decommission), WaTech will contact the Customer to initiate planning.

Both	2	<b>Open a Service Request Ticket</b>
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To initiate planning, the Customer or the WaTech Project Manager will submit the [Data Center Onboarding Service Request Ticket \(Parent\)](#) to [servicedesk@WaTech.wa.gov](mailto:servicedesk@WaTech.wa.gov). The resulting ticket created by the WaTech Service Desk will be used as the ‘Parent’ ticket to track the entire onboarding process. The Infra Request Number will be given to the Customer agency.

The ‘Parent’ ticket will be used to capture information such as Customer contact information, a description of the inquiry (i.e. ready to migrate to the data center), the timeframe desired, and the Customer’s basic constraints regarding onboarding.

The WaTech PM will request that the WaTech Service Desk create an [Information Request for Change Ticket \(IRFC\)](#) for authorized Customer individuals to supply to the data center Physical Security desk for all data center access for the duration of the onboarding activities.

Supporting work request tickets (aka ‘Child’ tickets) for each of the implementing teams will be created using the [Data Center Onboarding Service Request Template \(Implementing Team\)](#) and will be linked to the Parent ticket. Any additional necessary tickets will be affixed throughout the onboarding process as required by the supporting teams and/or the WaTech change management process.

Both	3	<b>Identify Move Team and Customer Contact(s)</b>
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The Customer Lead will identify the staff needed to support onboarding activities and add each team member’s to the project’s distribution list (i.e. WaTech DL SDC Projects ATG). WaTech will utilize that distribution list to manage access to project documentation on the ASK site.

WaTech will assign a Project Manager to assist the Customer through the onboarding process. While many individuals and groups throughout WaTech support onboarding, the WaTech Project Manager will serve as the single point of contact for the Customer Lead throughout the onboarding process to enable thorough, timely and consistent communication between all necessary parties.

Effective Customer engagement, responsive Customer service, and Customer satisfaction are critical to WaTech’s mission. With this in mind, WaTech has formed a Customer Relationship Team focused on ensuring that agencies receive the highest level of Customer service possible. The Customer Relationship Team includes dedicated Customer Account Managers (CAMs) whose objective is to ensure a high level of satisfaction with WaTech products and services. Contact information for each organization’s CAM can be found in the [Customer Account Manager Assignments](#) list.

All Customer data and documentation supporting the onboarding process will be updated and archived in Customer folders on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the WaTech Agency Shared Knowledge (ASK) SharePoint site.

WaTech also maintains a ListServ to notify its Customers of incidents, Internet and web-related occurrences, and technical bulletins. The Customer Lead should determine which members of the Customer team should be on this email distribution list and follow the instructions described in the [WANotification ListServ Subscription for WaTech Customers](#) to ensure they are receiving the necessary notifications.

Both	4	<b>Schedule and Conduct Onboarding Orientation Session</b>
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The WaTech Project Manager will schedule an Onboarding Orientation session that includes the team members from both the Customer and WaTech teams. Likely WaTech attendees will include the WaTech Project Manager, the Customer Account Manager, The Colocation Service Owner, and a representative from Data Center Facilities, Network, and Security Perimeter Services.

This initial session will lay the groundwork and provide general scope and direction for the pending onboarding. The teams will review the process outlined in this Data Center Onboarding Guide, discuss service options, perceived issues and risks, and work towards achieving an initial high-level understanding of current business and technical requirements.

Dependent on the volume of equipment to be moved into the data center, the steps in this Guide may be iterative to support multiple onboarding events.

Because this session lays the foundation for all onboarding activities, it is most beneficial to Customers who bring impacted project lead from all technical areas involved in onboarding activities to the session.

Customer	5	<b>Determine High Level Project Strategy</b>
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Planning is instrumental to onboarding success. Applications and infrastructure should be logically bundled, based on interdependencies, to streamline onboarding activities while minimizing business impact. Onboarding strategies should also address risks such as interdependent application complexity and unsupported (legacy) hardware compatibility.

Customers will need to assess and analyze their intended onboarding strategy to the data center.

The Customer’s business requirements will help to structure onboarding steps and identify move resources. A Customer may choose to leverage the support of the WaTech-contracted move vendor. The move vendor can perform infrastructure move activities end-to-end. Move vendor engagement and guidance will help to structure onboarding steps.

A Customer may conversely choose to not utilize the WaTech-contracted move vendor. In this case, the Customer would be responsible for move activities. Planning and oversight will be maintained by WaTech in either case.

At the Orientation session, The WaTech Project Manager will assist the Customer to begin this planning and summarize the Customer agency’s initial onboarding strategy in the [Data Center High Level Onboarding Strategy](#) document. Documenting the approach is especially helpful for team members who are not able to attend the Orientation session and/or team members that join the team later.

Both	6	<b>Determine Connectivity Requirements</b>
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WaTech and the Customer will collaboratively determine which of the five WaTech-identified network models best meet the Customer’s business needs. These business needs can be met by one or a combination of these models. Model A provides an option that the majority of environment is owned

and operated by the Customer. Each model progressively reduces Customer-managed equipment and increases consolidation into WaTech Managed Services. Model E provides for a WaTech fully-managed environment.

	<b>Colo - Carrier of Choice</b>	<b>Colo with SGN</b>	<b>Colo with Network Access (L3) provided by WaTech</b>	<b>Full Network Infrastructure Consolidation</b>	<b>WaTech Fully Managed Infrastructure</b>
	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Option Description</b>	The Customer hosts and operates their compute infrastructure (servers, storage, network security and other appliances), their Network Access Layer and Network Routing Services, but contract with a non-WaTech 3rd party provider for Network Services and for Internet Access.	The Customer hosts and operates their compute infrastructure (servers, storage, network security and other appliances), their Network Access Layer and internal Network Routing Services, but contract with WaTech as the Network Services Provider to state resources and for Internet Access.	The Customer hosts and operates their compute infrastructure (servers, storage, network security and other appliances) and manages the Network Access Layer, but contract with WaTech to provide Network Routing Services for their internal services and uses WaTech as the Network Services Provider to state resources and for Internet Access.	The Customer hosts and operates their compute infrastructure (servers, storage and other appliances) but leverages WaTech network infrastructure for the Network Access Layer and Network Routing Services and uses WaTech as the Network Services Provider and for Internet Access.	Customer's applications operate on fully hosted WaTech services such as Virtual Server Hosting to the WaTech Private Cloud.
<b>Customer Characteristics</b>	Customers who do not make use of WaTech hosted services, but have a need for a purpose-built facility within which to operate their computing infrastructure and who rely on 3rd party providers for network connectivity, would use this Colocation Service model. An example would be an organization whose systems are fully self-contained and managed by internal staff and who contract thru K20 - UW/GigaPop for network services.	Customers who rely on WaTech for network connectivity to state resources but manage their internal network access layer and routing within the enclosure would use this Colocation Service model. An example would be an organization that leverages WaTech network services for transport between their corporate sites and to other state services. These Customers manage their own TCP/IP and Routing protocols.	Customers who rely on WaTech for network routing services but manage their own LANs and access layer switching in their enclosure(s) would use this Colocation Service model. Customers may operate multiple network segments within an enclosure. Customers manage their own LAN and desktop services.	Customers who wish to focus on managing their server & application infrastructure. Customers L2/L3 Network services and data center facilities management are provided by WaTech.	Customers who wish to focus on managing their server & application infrastructure and have WaTech manage their data communications infrastructure.
<b>Connection</b>	Carrier of Choice	Ability to connect to the SGN, IGN and PGN	Ability to connect to the SGN, IGN and PGN	Ability to connect to the SGN, IGN and PGN	Ability to connect to the SGN, IGN and PGN
<b>Management</b>	Customer manages all network infrastructure	Customer manages all agency network infrastructure	Customer manages Layer 2 network WaTech manages Layer 3	WaTech manages Layer 2 and Layer 3 network infrastructure	WaTech manages all network infrastructure
<b>SGN Access</b>	No SGN Access	Direct Access to SGN	Direct Access to the SGN	Direct Access to the SGN	Connectivity to the SGN
<b>Access to WaTech Service Catalog</b>	No access to Services from the SGN	Access to WaTech Services Catalog	Access to WaTech Services Catalog	Access to WaTech Service Catalog	Access to WaTech Service Catalog

The Customer will document their connectivity requirements for equipment moving to the data center

by filling out the [Data Center Network Questionnaire – Part 1](#).

Customers migrating into the data center who choose Network Model B, C, or D will need to also fill in the applicable answers on [Data Center Network Questionnaire – Part 2](#). Customer responses may be dependent on consultation with WaTech.

Once completed, the Customer will post the completed forms in the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site and notify the WaTech Project Manager.

Customer	7	<b>Document Business Requirements for Applications and Services</b>
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All the steps necessary to complete equipment onboarding will be coordinated and tracked by the WaTech Project Manager. While a data center equipment installation may seem like a hardware infrastructure activity, there are also business impacts of the choices made as part of the installation. Agencies should plan mitigation strategies to reduce possible impacts to the applications migrating between data centers to minimize service disruptions. There may be opportunities to take advantage of cost savings, environmental clean-up or desired enhancements. However, large transformations make troubleshooting and timeframes more difficult to manage.

Evaluating business requirements may result in consideration of consolidation into WaTech-managed services. If so, the Customer may open a service request ticket with WaTech Service Desk for consultation with the respective WaTech Service Owners for onboarding independent consultations to learn more about services such as server hosting, storage, firewall, network, telephony, etc.

Both	8	<b>Update Onboarding Form</b>
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The Colocation Service Owner will work with the Customer to prepare the [Colocation Onboarding Form](#). This form captures specific information that lists the services to be provided to the Customer, Customer contact information, and more. Once created the form will be posted to the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) of the ASK site.

Customer	9	<b>Inventory Equipment</b>
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WaTech Data Center Facilities will ensure the capacity necessary to support the onboarding of Customer equipment. Details to be addressed include, but are not limited to, floor space management, power distribution, enclosure count, and network and storage cabling.

The Customer will document their IT infrastructure inventory on the [Data Center Facilities Equipment List](#) to assist WaTech Facilities with the capacity planning effort. WaTech Facilities will utilize the Customer's inventory information and update the [Data Center Infrastructure Management \(DCIM\)](#) tool to conceptualize the future design in the data center. Customers needing infrastructure separation should communicate such request(s) now for consideration.

Both	10	<b>Develop a DRAFT High Level Design</b>
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A High Level Design (HLD) is the overall system design covering the system architecture and integration design. It describes the relationship between various modules and functions of the system. Data flow, flow charts and data structures are often present in a HLD. The HLD is normally a logical representation of the overall solution, including the types and number of connections to be utilized.

The amount of work needing to be done by WaTech will vary based on the network model selected. If model B, C, or D were selected, WaTech would need to assist in the creation of the HLD.

The Customer will create a HLD draft based on their unique business requirements and provide to WaTech in the applicable Customer folder on the [SDC Projects](#) page or [WaTech Quincy](#) page of the ASK site.

The Draft HLD will be influenced by the discussion that occurs during the High Level Consult. WaTech and the Customer will utilize this design in the Security Design discussions.

Both	11	<b>Schedule and Conduct a Combined High Level Consult</b>
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The WaTech Project Manager will schedule and facilitate a High Level Consult that serves as a collaborative brainstorming session centered on the Draft HLD. WaTech Data Center Facilities, Security Perimeter Services, and Enterprise Data Network teams will work with the Customer to discuss network security, networking, and space management options.

WaTech staff and the Customer will review the Draft HLD in an effort to identify onboarding issues and answer questions. This discussion will assist the teams to understand interdependencies that will help to define future move groups. Some applications will need to be moved together while other applications can be unbundled and move independently.

A representative from the State Office of CyberSecurity will also attend the High Level Consult to gain an understanding of the project and determine the next steps necessary to complete Security Design review and approval. To aid with tracking the disposition of the review and next steps, the [Security Review Disposition Form](#) will be placed in the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site. If gaps are identified during the review, necessary steps to eliminate gaps will be defined in the Disposition Form.

Both	12	<b>Begin Elevation Planning</b>
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The equipment inventoried on the [Data Center Facilities Equipment List](#) will be reviewed with the Data Center Facilities team. The Data Center Facilities lead will work with the Customer’s technical lead to strategize regarding equipment placement in assigned enclosure(s) based on power, cooling, structured cabling, network switches, ports, etc. The Data Center Facilities team will enter detailed product information (e.g. make, model and product vendor name) into the Data Center Infrastructure Management (DCIM) tool and will provide to the Customer the exact location where each device will be placed in the enclosures.

Data Center Facilities provides all cabling external to the enclosure.

For internal cabling, two options exist:

- Circuits/cables installed within the same enclosure can be completed by the Customer. The Customer will be responsible for providing the cables and ensuring the cables are installed per the TIA/EIA 568C, RCW19.28, and WAC296-46B series standard. The WaTech Facilities team will provide oversight to ensure the standard is followed.
- Cables/circuits installed within the enclosure can also be requested to be completed by WaTech Facilities team. A quote will be provided which includes labor and materials. The cost of cabling fluctuates based on the price of copper so a current quote will be provided in each instance. WaTech will provide all cables and labeling.

The Customer is required to complete the [Data Center Facilities Connectivity Cut Sheet](#) to document their required connections.

Both	13	<b>Schedule Regular Status Session(s)</b>
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WaTech and the Customer will progress with detailed tactical planning sessions. For Customers with multiple move events spanning a long duration, the WaTech Project Manager will schedule regularly recurring meetings with the Customer and any necessary team members to further review and complete readiness tasks and required documentation.

These meetings will be conducted on a regular basis and will be used to convey project status, move scope, schedule, and objectives. WaTech and the Customer will continually review and update the schedule, action item log and verify progress against the [Data Center Onboarding Guide Checklist](#).

The Customer is expected to attend prepared to discuss inventory of equipment, move order (what moves when), risks and issues, high-level requirements and desired schedule and timeframe.

Both	14	<b>Meet to Discuss Professional Services Support (as applicable)</b>
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If the Customer has Professional Services requirements, they should notify the WaTech Project Manager who will facilitate a meeting with the appropriate WaTech teams. For example, a meeting would be scheduled with the WaTech Command Center if the Customer has tape-handling requirements. Once the desired services are confirmed, the Colocation Service Owner will prepare an updated quote.

Both	15	<b>Meet with Telephony Team (as applicable)</b>
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WaTech has an established contract for Centrex (central office based telephone) services. This service meets the State requirements for competition and is available for use by Customers eligible for WaTech services. WaTech also installs, operates, and maintains shared Private Branch Exchange (PBX) systems that deliver telephone service at economical rates. If the Customer has telephony requirements, for either Centrex or PBX services, notify the WaTech Project Manager who will facilitate a meeting with the WaTech Telephony Team and the Colocation Service Owner. Once the desired service is confirmed, the Colocation Service Owner will prepare an updated quote.

Customer	16	<b>Update the Draft High Level Design</b>
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The Customer will update the HLD Draft based on feedback from the Combined High Level Consult, complete any related re-architecture action items, post the updated document(s) to the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site, and notify the WaTech Project Manager.

Both	17	<b>Schedule and Conduct a Security Design Review</b>
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Using the [Security Design Review Service Request Template](#), the WaTech Project Manager or the Customer will submit a request to the WaTech Service Desk to request a Security Design Review by the State Office of CyberSecurity. To prepare for the discussion, the Customer will need to complete a [Security Design Review Checklist](#), especially if they intend to transform an application(s) as part of onboarding.

The security design discussion will focus on the Customer’s HLD and the completed [Security Design Review Checklist](#). The review will ensure the proposed design for the equipment is compliant with OCIO security requirements.

Based on information gathered during the discussion, more detailed information or updates may be requested. If there are changes made to the HLD, a follow-up review may be necessary.

Customer	18	<b>Finalize the High Level Design</b>
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Based on the discussion in the High Level Consult and/or the Security Design Review, the Customer will finalize their HLD, post it to their Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site, and notify the WaTech Project Manager.

The finalized HLD document represents the complete solution. It describes each system, sub-system and component as well as the connectivity and inter-connectivity required to implement the solution. It should be used as the document of record and updated to reflect any changes in the future in the “as-designed” documentation.

Both	19	<b>Procurement Check-In</b>
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WaTech and the Customer will evaluate the HLD to ensure that the facilities and equipment necessary for onboarding are present and operational in the data center. There may be circumstances where additional capacity and capabilities are required. If needed, the procurement process is activated with WaTech Office of Legal Services (OLS) and the Customer’s procurement office.

Both	20	<b>Create the Bill Of Materials</b>
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The HLD work captured will enable all service areas to create a Bill of Materials (BOM) for their service area and create detailed project and work effort-planning documents.

Based on the Customer’s finalized HLD and elevation planning, a Draft Detailed Design and Draft BOM will be created and posted to the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site.

The Customer will finalize the BOM based on any clarifications gained during onboarding planning sessions to set in motion a set of activities and procurements WaTech and/or the Customer need to perform to complete onboarding.

Equipment shipped directly from a vendor to Colocation Olympia should be addressed to 532 16th AVE SE, Olympia, WA 98504-5890. Equipment shipped directly from a vendor to Colocation Quincy should be addressed to 2200 M Street NE, Quincy, WA 98848.

Equipment received at a data center loading dock must be coordinated by the Customer and must be signed for by the Customer to ensure all necessary parts arrive and are undamaged. After delivery, the equipment will be stored short term until the installation date. Long-term storage is not available.

Both	21	<b>Complete Elevations</b>
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The Customer will review and approve the elevations developed in collaboration with the WaTech Facilities team. The final elevations will be posted to the applicable Customer folder on the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site.

WaTech	22	<b>Issue Quote</b>
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WaTech Colocation will develop a quote for the Colocation services required by the Customer and send the quote to the Customer for review and acceptance.

Customer	23	<b>Accept Quote</b>
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The Customer will review and accept the quote by sending an email to the WaTech Colocation Service Owner.

Customer	24	<b>Accept Terms of Service (TOS)</b>
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The Customer will accept the Terms of Service (TOS) for the WaTech Colocation service.

Both	25	<b>Complete Move Vendor Statement of Work (Optional)</b>
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For Customers who have chosen to utilize the WaTech-contracted move vendor, the requested scope of work for each move activity will need to be documented in a Statement of Work prior to engaging the move vendor to assist with planning.

WaTech will facilitate conversations with the move vendor and Customer to complete this task.

Both	26	<b>Purchase Required Materials</b>
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Based on the High Level Design and BOM, WaTech will purchase all required materials (i.e. cables, power cords, etc.) needed to support Customer onboarding. Lead times of 4-6 weeks for cables and 6-8 weeks for power are required. Depending on the size and scope of equipment needs, additional time may be required.

<b>30-60 DAYS BEFORE ONBOARDING</b>
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Both	27	<b>Sign Interagency Agreement (optional)</b>
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WaTech developed an [Interagency Agreement \(IAA\)](#) to document roles and responsibilities regarding move activities for Customers choosing to use the Move Vendor. The IAA covers the work details, timing, special instructions and terms between WaTech and the Customer. The IAA will need to be signed before onboarding begins.

Customer	28	<b>Complete Data Center Facility Access Requirements</b>
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It is important that all agencies and Customers installing equipment in the data center fully understand, agree to, and follow the [Data Center Access and Security Procedures](#). The Data Center Physical Security team, comprised of a Data Center Physical Security Manager and a Data Center Facility Manager, is responsible for the administration of access procedures. Customer staff, vendors, contractors, service providers and/or any other representative(s) requiring access to the data centers must be pre-authorized. An Authorized Individual (AI) is any person who has successfully completed the Data Center Physical Access Authorization Process and is granted unescorted access privileges.

The WaTech Project Manager will use the [Data Center Onboarding Service Request Template \(Badge\)](#) to open a service request ticket on behalf of the Customer to request data center access badges. Customers must complete the [Data Center Authorized Approver Form](#) for physical security authorization. The form documents the Customer’s authorization for physical access to assigned areas within WaTech managed Data Center Facilities. Customers are responsible to provide WaTech Physical Security signed approvals for this access. A secondary name is also recommended on the form in the event that the primary approver is not available. The Data Center Physical Security Access Form denotes an Authorized Individual (AI) and will be filled in by the Physical Security Manager and signed by the Customer.

A Data Center Facilities Equipment Tracking Log is located at the Data Center Security Control Center and is the primary means for documenting equipment installations and removals from the data center. In the event of a large onboarding event, it is highly recommended that Customers pre-populate the log that can be found at the back of their [Data Center Facilities Work Plan](#).

Both	29	<b>Attend Physical Security Orientation</b>
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The Data Center Physical Security team will schedule a physical security orientation for each authorized individual who will be receiving an access badge. The meeting will include a physical security orientation, distribution of the badge, etc.

Both	30	<b>Complete the Data Center Facilities Work Plan</b>
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To guide the installation effort(s), WaTech will work with the Customer to complete the [Data Center Facilities Work Plan](#) for each onboarding event identified. For Customers who have chosen to utilize the WaTech-contracted move vendor, the move vendor will also assist with the creation of the Work Plan.

The Work Plan will detail the steps to be followed during onboarding, as well as the specific date(s), time(s), responsible parties, and status timeframes for onboarding as a whole. The Work Plan will be attached to an [Install Request for Change \(IFRC\)](#) by the Data Center Facilities group.

Customer	31	<b>Create Back-out Plan</b>
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The Customer will create a back-out plan to be used in the event a problem arises that cannot be resolved during the onboarding window. Escalation contacts and Go/No Go timeframes will be identified as part of the back-out plan.

Customer	32	<b>Create Test Plan</b>
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Customers will develop a test plan to be executed immediately following installation. The test plan ensures that onboarding work activity is complete and associated services and/or applications are operating as expected post-onboarding. Effective test plans verify that network connectivity, software applications, operating systems, etc. are functional as expected. Business users should likewise test for application business function.

It is highly recommended that each test plan be assessed early to ensure its integrity. Lessons learned and alternative test options can be implemented prior to the actual onboarding event if issues are identified from this assessment.

Both	33	<b>Schedule Onboarding Event</b>
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The Customer and WaTech will coordinate date(s) and time(s) for each onboarding event. Several factors will be considered, based on Customer business requirements.

Considered factors should include (but are not limited to):

- End User Impact
- Core Business Hours
- Staffing/Resources
- Maintenance Schedules
- Changes (e.g. network, system, etc.) occurring at the agency

Customers may decide to migrate during the day, overnight, or potentially over the weekend.

WaTech	34	<b>Prepare Facilities</b>
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Based on the finalized [Data Center Facilities Equipment List](#), the Data Center Facilities team will identify the enclosures to be utilized by the Customer. Facilities will install the necessary core infrastructure (power, non-standard enclosures, cabling, cooling, etc.) to ready the space for Customer onboarding.

Both	35	<b>Prepare for Necessary Network and Firewall Updates</b>
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Based on Customer requirements provided with the detailed design, WaTech Network and Security Perimeter Services will work with the Customer to prepare any necessary network configuration changes to ready the network for Customer onboarding activities. This may include VLAN renumbering and/or extensions to avoid numbering conflicts.

<b>30 DAYS BEFORE ONBOARDING</b>
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WaTech	36	<b>Submit Install RFC for Onboarding</b>
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The implementing group leading the onboarding effort will create an [Install Request for Change](#) in WaTech's internal change management system. This Request for Change will document the Customer's onboarding timeline from beginning to end. The Work Plan will be attached to this ticket.

Both	37	<b>Confirm Readiness</b>
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The Customer and WaTech staff will verify all network cabling, firewall, and associated network configurations are either in place or are on schedule.

Approximately a week prior to the onboarding event, WaTech will place the event on the Network Control Center (NCC) Calendar. The NCC Supervisor will assign the technician and update the calendar entry with the name of the technician who will perform the cutover.

Approximately a week prior to the onboarding event, the WaTech Project Manager will host a meeting of all parties assigned a role during the onboarding. This should include the Customer Business Lead, any Customer team members supporting the move, the WaTech Project Manager, and Data Center Facilities. Additional attendees who may have a role include WaTech NCC technicians, Enterprise Data

Networks, Security Perimeter Services, and/or the Move Vendor technical lead(s) assigned to support the move.

When network changes are included in the event, approximately three days prior to the confirmed onboarding date, WaTech will host a pre-cut call with the NCC technician and Customer to ensure all teams are fully prepared to execute the install/change. Any issues elevated during the pre-cut call will be addressed and/or escalated in an attempt to keep to the identified schedule.

Both	38	<b>Confirm Onboarding Schedule and Plan Go/No Go</b>
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WaTech will check-in with the Customer to verify, confirm and make final adjustments (if any) to the schedule and onboarding plan prior to the onboarding day. The Go/No Go decision will occur at this time.

WaTech	39	<b>Send Onboarding Notifications</b>
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One day prior to an onboarding event, the WaTech Project Manager will send out notifications describing the specifics of the next day’s onboarding activities. The notifications will include scope of the onboarding, the onboarding team, escalation contacts, back-out window, etc.

This same notifications will be used on the day of the onboarding using “Reply All” to indicate move activities have begun.

<b>ONBOARDING DAY</b>
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Customer	40	<b>Ready Move Team</b>
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For Customers who have chosen to utilize the WaTech-contracted move vendor, the move team will need to be present at the start of the scheduled equipment de-installation to the re-installation of equipment at the destination site. The Customer is to remain onsite with the vendor until the devices are restored to acceptable operating condition. Otherwise, the Customer will assemble their move team to begin the physical onboarding process.

Both	41	<b>Send Notifications of the Start of the Move</b>
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The Customer will notify its end users at the start of the move following internal processes.

The WaTech Project Manager will send the appropriate notifications at the start of the move by hitting “Reply All” on the notification messages sent the day before the onboarding event. These messages will inform all stakeholders that the move has begun.

Customer	42	<b>Execute Onboarding Plan</b>
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The Customer should bring along a copy of their [Data Center Facilities Work Plan](#) to ensure they have all the details of the day’s plan at their fingertips. The delivery of equipment may be performed in conjunction with the WaTech-contracted Move Vendor in collaboration with the Customer. In this case, that activity would be included in the Work Plan, also.

When the Customer’s assigned staff arrive at the Data Center, they should first check into the Data Center Security Desk. They will be required to provide the Informational Request for Change (IRFC) ticket number that was created at the start of the project by the WaTech Project Manager and the Data Center Equipment Tracking Log from their Work Plan when registering at the Data Center Security Desk.

Authorized Individuals will present their access badge or be accompanied by a badged Authorized Individual. Guests being escorted must present two forms of picture identification. Guests must remain with their Authorized Individual at all times inside the Data Center.

After checking into the Data Center Security Desk, Customers can request the Data Center Facilities team to meet them at the Data Center loading dock with a dirty cart. A dirty cart can be used to transport equipment inside to the shipping and receiving area where equipment can be unboxed and vacuumed for dust. If rails or ears need to be mounted on the equipment prior to installation in the data halls, this can be done either in the work area or in the shipping and receiving area.

When the equipment has been readied to be moved to the enclosures in the data halls, the Customer can request clean carts for transport. Safety goggles, cordless screwdrivers, and lifts are available upon request from the Data Center facilities team member overseeing the installation. Customers may bring their own tools. While cordless screwdrivers are permitted, cordless drills are not allowed due to torque issues.

There are two cordless phones available at the Data Center Security Desk for checkout by Customers. These cordless phones can be used anywhere inside the data center. The Customer may also use cell phones while inside the data center; however, coverage for cell phones inside the data center varies. Cell phone use as a data hotspot is not allowed.

If the Customer would like to use office space during an onboarding event or needs a network connection, they may use the desk space that has been made available for Customer use. This work area has desks, telephones, and a network connection.

Customer	43	<b>Perform System Testing</b>
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After all equipment is in the data center, the Customer will perform system testing, as identified in the test plan, to ensure components functionally meet business requirements. Interdependent applications should be tested at this time to ensure network performance and cooperation. If any issues are discovered, the Customer will troubleshoot the problem. If any issues cannot be resolved within the pre-defined window, the back-out plan will be initiated and the onboarding will be rescheduled.

Upon system testing completion, the Customer will notify their end user(s) to begin acceptance testing.

Customer	44	<b>Perform User Acceptance Testing</b>
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End user acceptance testing acts to verify necessary business functionality and to ensure proper functioning of the system. If the software works as required and without issues, the Customer can reasonably identify the system as stable.

The Customer will perform application-level validation as identified in the test plan. It is highly encouraged that validation occurs immediately after onboarding to avoid unplanned business impact. If issues are discovered that cannot be resolved within the pre-defined window, the back-out plan will be initiated, and the onboarding rescheduled.

Customer will notify WaTech of completion of acceptance testing.

Both	45	<b>Send Notifications of the End of the Move</b>
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The Customer will notify its end users at the end of the move following internal processes.

The WaTech Project Manager will send the appropriate notifications at the end of the move by hitting “Reply All” on the notification messages sent at the start of the onboarding. These messages will inform all stakeholders that the move has completed.

<b>POST-ONBOARDING</b>
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Both	46	<b>Disconnect Billing (if applicable)</b>
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To avoid duplicate billing to Customers, the Colocation Service Owner will verify with internal groups if any network, telephony, or other prior service changes to the location being vacated should stop or change billing.

Both	47	<b>Standby Monitoring</b>
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Depending on the complexity and criticality of systems migrated, the Customer and WaTech may choose to have staffing resources available for immediate post-onboarding issue resolution. WaTech and the Customer will create a contact list for reaching the appropriate network, storage, server admins, application support and Security Perimeter Services personnel. The various groups should be given documentation of the environment to appropriately answer questions and recommend intended solutions.

Both	48	<b>Update As-Built Document</b>
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Now that IT equipment is installed and functioning to expectation, WaTech and the Customer will detail the as-built environment for documentation purposes. The HLD document may need to be updated to reflect any changes that caused deviation from the original design. Effective As-Built documents depict deviations from the original documentation, resource for future maintenance and planning, provide a snapshot of existing design, and verify and confirm existing IT infrastructure.

Both	49	<b>Transition from Project to Operations</b>
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Once the initial onboarding scope of work has completed, the Customer will independently make maintenance requests as needed following the [Data Center Facilities Moves, Adds, and Changes Process \(MAC Process\)](#).

When a Customer needs to access an enclosure or make a minor change such as swapping hard drives or adding an expansion model, the Customer will notify the WaTech Service Desk of the need for access and request an Informational Request for Change (IRFC) will be created.

When a Customer needs a change to equipment in an enclosure(s) that requires a change to power, cooling or elevations, the Customer will request that the WaTech Service Desk open a ticket with Data Center Space Management to discuss updates. For a small change, the Data Center Space Management team will assist the Customer to complete updates to the equipment list, connectivity cut sheets, elevations, and any necessary Work Plans. If the scope of work is large or requires collaboration across WaTech support teams, the Data Center Space Management team will alert the WaTech Enterprise Project Office to request facilitation support and the Colocation Service Owner for support, including updated quotes that may be necessary.

WaTech	50	<b>Close Onboarding Service Request Ticket</b>
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The Customer will sign the [Data Center Onboarding Guide Checklist](#) signifying onboarding completion and submit to the [SDC Projects](#) page or the [WaTech Quincy](#) page of the ASK site. The WaTech Project Manager will then close the Parent Service Request Ticket. All Child tickets must be closed before the Parent ticket will be closed.

## Appendix A – Reference Documents for Colocation Onboarding

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### **Colocation Quincy**

The materials referenced throughout this document to support onboarding into **Colocation Quincy** can be found in the [All General Information](#) directory of the [WaTech Quincy](#) ASK site:

[ESHB 1216](#)

[State Data Center \(SDC\) Plan Update](#)

[WaTech Colocation Service Catalog page](#)

[Data Center Onboarding Service Request Template \(Parent\)](#)

[Data Center Onboarding Service Request Template \(IRFC\)](#)

[Data Center Onboarding Service Request Template \(Implementing Team\)](#)

[WaTech Customer Account Managers](#)

[WANotification ListServ Subscription for WaTech Customers](#)

[Data Center Network Questionnaire – Part 1](#)

[Data Center Network Questionnaire – Part 2](#)

[Data Center High Level Onboarding Strategy](#)

[Colocation Onboarding Form](#)

[Data Center Facilities Equipment List](#)

[Data Center Infrastructure Management \(DCIM\)](#)

[Security Review Disposition Form](#)

[Data Center Facilities Connectivity Cut Sheet](#)

[Data Center Onboarding Guide Checklist](#)

[Security Design Review Service Request Template](#)

[Security Design Review Checklist](#)

[InterAgency Agreement for Move Services](#)

[Data Center Access and Security Procedures](#)

[Data Center Onboarding Service Request Template \(Badge\)](#)

[Data Center Authorized Approver Form](#)

[Data Center Facilities Work Plan](#)

[Data Center Onboarding Service Request Template \(Install RFC\)](#)

[Data Center Facilities MAC Process](#)

## Colocation Olympia

The materials referenced throughout this document to support onboarding into **Colocation Olympia** can be found in the [All General Information](#) directory of the [SDC Projects](#) ASK site:

[ESHB 1216](#)

[State Data Center \(SDC\) Plan Update](#)

[WaTech Colocation Service Catalog page](#)

[Data Center Onboarding Service Request Template \(Parent\)](#)

[Data Center Onboarding Service Request Template \(IRFC\)](#)

[Data Center Onboarding Service Request Template \(Implementing Team\)](#)

[WaTech Customer Account Managers](#)

[WANotification ListServ Subscription for WaTech Customers](#)

[Data Center Network Questionnaire – Part 1](#)

[Data Center Network Questionnaire – Part 2](#)

[Data Center High Level Onboarding Strategy](#)

[Colocation Onboarding Form](#)

[Data Center Facilities Equipment List](#)

[Data Center Infrastructure Management \(DCIM\)](#)

[Security Review Disposition Form](#)

[Data Center Facilities Connectivity Cut Sheet](#)

[Data Center Onboarding Guide Checklist](#)

[Security Design Review Service Request Template](#)

[Security Design Review Checklist](#)

[InterAgency Agreement for Move Services](#)

[Data Center Access and Security Procedures](#)

[Data Center Onboarding Service Request Template \(Badge\)](#)

[Data Center Authorized Approver Form](#)

[Data Center Facilities Work Plan](#)

[Data Center Onboarding Service Request Template \(Install RFC\)](#)

[Data Center Facilities MAC Process](#)

## Appendix B – Onboarding Checklist

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### Readiness Activities

Both	1	Initiate Onboarding Planning	<input type="checkbox"/>
Both	2	Open a Service Request Ticket	<input type="checkbox"/>
Both	3	Identify Move Team and Customer Contact(s)	<input type="checkbox"/>
Both	4	Schedule and Conduct Onboarding Orientation Session	<input type="checkbox"/>
Customer	5	Determine High Level Project Strategy	<input type="checkbox"/>
Both	6	Determine Connectivity Requirements	<input type="checkbox"/>
Customer	7	Document Business Requirements for Applications and Services	<input type="checkbox"/>
Both	8	Update Onboarding Form	<input type="checkbox"/>
Customer	9	Inventory Equipment	<input type="checkbox"/>
Both	10	Develop a Draft High Level Design	<input type="checkbox"/>
Both	11	Schedule and Conduct a Combined High Level Consult	<input type="checkbox"/>
Both	12	Begin Elevation Planning	<input type="checkbox"/>
Both	13	Schedule Regular Onboarding Status Session(s)	<input type="checkbox"/>
Both	14	Meet to Discuss Professional Services Support (as applicable)	<input type="checkbox"/>
Both	15	Meet with Telephony Team (as applicable)	<input type="checkbox"/>
Customer	16	Update the Draft High Level Design	<input type="checkbox"/>
Both	17	Schedule and Conduct a Security Design Review	<input type="checkbox"/>
Customer	18	Finalize the High Level Design	<input type="checkbox"/>
Both	19	Procurement Check-In	<input type="checkbox"/>
Both	20	Create the Bill Of Materials	<input type="checkbox"/>
Both	21	Complete Elevations	<input type="checkbox"/>
WaTech	22	Issue Quote	<input type="checkbox"/>
Customer	23	Accept Quote	<input type="checkbox"/>
Customer	24	Accept Terms of Service (TOS)	<input type="checkbox"/>
Both	25	Complete Move Vendor Statement of Work (Optional)	<input type="checkbox"/>

Both	26	<b>Purchase Required Materials</b>	<input type="checkbox"/>
Both	27	<b>Sign Interagency Agreement (optional)</b>	<input type="checkbox"/>
Customer	28	<b>Complete Data Center Facility Access Requirements</b>	<input type="checkbox"/>
Both	29	<b>Attend Physical Security Orientation</b>	<input type="checkbox"/>
Both	30	<b>Complete the Data Center Facilities Work Plan</b>	<input type="checkbox"/>
Customer	31	<b>Create Back-out Plan</b>	<input type="checkbox"/>
Customer	32	<b>Create Test Plan</b>	<input type="checkbox"/>
Both	33	<b>Schedule Onboarding</b>	<input type="checkbox"/>
WaTech	34	<b>Prepare Facilities</b>	<input type="checkbox"/>
Both	35	<b>Prepare for Necessary Network and Firewall Updates</b>	<input type="checkbox"/>
WaTech	36	<b>Submit Install RFC for Onboarding</b>	<input type="checkbox"/>
Both	37	<b>Confirm Readiness</b>	<input type="checkbox"/>
Both	38	<b>Confirm Onboarding Schedule and Plan Go/No Go</b>	<input type="checkbox"/>
WaTech	39	<b>Send Onboarding Notification</b>	<input type="checkbox"/>

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Signature

Date

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Print Name & Title

Agency Name

**Move Event Activities**

Customer	40	<b>Ready Move Team</b>	<input type="checkbox"/>
Customer	41	<b>Send Notification of the Start of the Move</b>	<input type="checkbox"/>
Customer	42	<b>Execute Onboarding Plan</b>	<input type="checkbox"/>
Customer	43	<b>Perform System Testing</b>	<input type="checkbox"/>
Customer	44	<b>Perform User Acceptance Testing</b>	<input type="checkbox"/>
Customer	45	<b>Send Notification of the End of the Move</b>	<input type="checkbox"/>

**Post Move Event Activities**

WaTech	46	<b>Disconnect Billing (as applicable)</b>	<input type="checkbox"/>
Both	47	<b>Standby Monitoring</b>	<input type="checkbox"/>
Both	48	<b>Update As-Built Document</b>	<input type="checkbox"/>
Both	49	<b>Transition from Project to Operations</b>	<input type="checkbox"/>
WaTech	50	<b>Close Onboarding Service Request Ticket</b>	<input type="checkbox"/>

## References

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