

# HPE Cooling Door and CDU Startup service

## HPE Lifecycle Services

### Service overview

HPE Cooling Door and CDU Startup service provides installation of cooling distribution unit (CDU) and cooling doors in high-performance computing (HPC) system racks from Hewlett Packard Enterprise.

This service provides site readiness verification, installation planning and management, unpacking, water hose connection of the CDU to facility plumbing, power on, verification of the system, cooling verification, and more. Customers who wish to purchase this service can order using the service product number specified in the [“Ordering information”](#) section for each CDU and/or cooling door.

### Service benefits

- A dedicated experienced HPC deployment project manager (DPM) to oversee the implementation of the service engagement
- Verification that all prerequisite infrastructure services are present and correct prior to installation
- Installation and startup by a team of HPC technical specialists
- Delivery of the service at a mutually scheduled time convenient to the Customer

### Service feature highlights

- Deployment management
- Site and service planning inspection and advice
- Installation and startup of the delivered cooling doors and/or CDU

Table 1. Service features

Service features	Delivery specifications
Deployment management	<p>An HPC DPM is assigned to help remotely manage the installation of the CDU and/or cooling door. Working closely with the Customer, the DPM performs the following tasks as part of deployment management:</p> <ul style="list-style-type: none"><li>• Coordinate the activities detailed in this data sheet</li><li>• Project manage the overall delivery and installation</li></ul>
Service planning	<p>The DPM works with the Customer to plan all in-scope activities identified in this data sheet, including the identification of any prerequisites and Customer responsibilities. The DPM schedules the on-site delivery of the service at a time mutually agreed upon by HPE and the Customer, which will be during local HPE standard business hours, excluding HPE holidays, unless otherwise agreed by HPE.</p> <p>The DPM performs the following tasks as part of service planning:</p> <ul style="list-style-type: none"><li>• Scheduling and confirming the installation dates with the Customer and the HPE service delivery specialist</li><li>• Communicating and confirming the planned CDU and/or cooling door delivery date with the Customer and the HPE service delivery specialist</li></ul>



**Table 1.** Service features (continued)

Service features	Delivery specifications				
<b>Site readiness verification checklist</b>	<p>HPE HPC technical staff works with the Customer to help assess the physical site requirements for the CDU and/or cooling door. HPE HPC technical staff also receives subsequent validation from the Customer that the requirements have been met prior to delivery of the installation services. Verification areas include, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• Location details, access route from delivery to the data center, flooring structure and loading, power and network cable location and routing (overhead, underfloor, cable trays, and others)</li> <li>• Accessibility from the building entrance to a designated position in the data center, route floor loading</li> <li>• Power and lighting considerations</li> <li>• Safety considerations for delivery, installation, and operation</li> <li>• Cooling considerations (room air cooling load and airflow)</li> <li>• Water preparation considerations (required facility plumbing and piping, condensation management, and others.). The primary water supply quality must meet the specifications in the site preparation guide over the life of the system.</li> </ul>				
<b>Installation and startup</b>	<p>Once the purchased CDU and/or cooling door are delivered to the Customer site, the HPE service delivery specialists arrive on-site to perform the installation and startup service.</p> <p>HPE provides the applicable installation activities as follows:</p> <table> <tr> <td> <p><b>Cooling door:</b></p> <ul style="list-style-type: none"> <li>• Install racks</li> <li>• Unpack rear door heat exchanger (RDHX) and place it onto a dolly to wheel into data center</li> <li>• Insert mounting hardware into rack prior to hanging RDHX</li> <li>• Remove RDHX from interface frame and place it on 2x4s</li> <li>• Place the interface frame onto the rack</li> <li>• Keep the heat exchanger on the interface frame</li> <li>• Run/connect RDHX thermal sensors to rack</li> <li>• Install control valve and actuator on the return line</li> <li>• Connect water hoses between the Customer facility and RDHX</li> </ul> </td><td> <ul style="list-style-type: none"> <li>• Provide system fluid startup and initial monitoring</li> <li>• Connect rack PDU whips to facility-provided connector</li> <li>• Connect power whips from RDHX to PDUs within the rack</li> <li>• Flip breakers on PDU in the rack, which turns on RDHX</li> <li>• Run RDHX functional testing</li> <li>• Using site engineering provided cooling configuration document program each RDHX with correct setpoints to achieve room neutral cooling</li> <li>• Connect Customer-provided network Ethernet cables between racks according to a predefined scheme dependent on the Customer order</li> </ul> </td></tr> <tr> <td> <p><b>CDU:</b></p> <ul style="list-style-type: none"> <li>• Install racks</li> <li>• Unpack RDHX and place it onto a dolly to wheel into data center</li> <li>• Insert mounting hardware into rack prior to hanging RDHX</li> <li>• Remove RDHX from the interface frame and place it on 2x4s</li> <li>• Place interface frame onto rack</li> <li>• Keep the heat exchanger on the interface frame</li> <li>• Run/connect RDHX thermal sensors to rack</li> <li>• Unpack CDU and roll into data center</li> <li>• Install secondary manifold under a raised floor</li> <li>• Connect primary water hoses between the Customer facility and CDU</li> <li>• Connect secondary water hoses from CDU to manifold</li> <li>• Install control valve and actuator on return line for each RDHX</li> <li>• Connect hoses from RDHX to the secondary manifold</li> </ul> </td><td> <ul style="list-style-type: none"> <li>• Customer-provided electrician to install power for CDU (direct wired)</li> <li>• Verify power is correct in CDU</li> <li>• Flip wall breakers to CDU</li> <li>• Flip switches on CDU panel to power on CDU</li> <li>• Fill CDU primary water loop by opening facility water valves to CDU and bleed air while checking for water leaks</li> <li>• Fill secondary loop with HPE provided water and pump</li> <li>• Bleed air out of RDHX</li> <li>• Connect rack PDU whips to facility-provided connector</li> <li>• Connect power whips from 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## Service limitations

The services are performed during HPE local business days and hours excluding HPE holidays.

The on-site service is delivered at one physical site on a single HPE CDU and/or cooling door.

All service items include project management of those items.

## Service eligibility

Customers are eligible for the delivery of this service if they meet the following prerequisites:

- The Customer must have ordered an HPE HPC system from HPE or HPE authorized partner in which the CDU and/or cooling doors are included.
- The Customer must have all required power source, water source, and network infrastructure in place as communicated by HPE and according to the HPE machine unit specification chart and ensure it is functioning prior to the scheduled on-site service.
- The Customer must ensure that the site, delivery route, cable runs, and power outlets conform to all applicable fire, safety, and electrical codes, and the primary water quality meets the HPE recommended specifications.
- The Customer must have documented basic server and network customization requirements, such as network settings (host name, IP address, subnet, and gateway), prior to kick off of the services, before the system ships. If this information is not provided, it could result in unnecessary delays.
- The Customer must meet all prerequisites prior to scheduling on-site delivery of the service.

## Customer responsibilities

The Customer will:

- Contact an HPE service specialist within 90 days of the date of purchase to schedule the delivery of the service
- Identify a dedicated project manager to work with the DPM to prepare for the CDU and/or cooling door installation
- Ensure that all service prerequisites have been either met as identified in this data sheet or as communicated to Customer
- Ensure power is available for the system as required prior to the installation service agreed date
- Establish conforming facilities water cooling environment and connection within an agreed distance of the delivered cooling connection points
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service, if applicable
- Allow HPE full and unrestricted access to all locations where the service is to be performed
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required

## General provisions / other exclusions

HPE reserves the right to charge, on a time-and-materials basis, for any additional work over and above the service package pricing that may result from work required to address service prerequisites or other requirements that are not met by the Customer.

HPE reserves the right to reprice for services not scheduled and delivered within 180 days. Backorders or shipment delays may affect the delivery timeline. Orders for services expire after 365 days (1 year) from the order acceptance date for services not scheduled and delivered, and Customer is not entitled to a refund for the unused services.

HPE's ability to deliver the services is dependent upon Customer's full and timely cooperation with HPE, as well as the accuracy and completeness of information and data the Customer provides to HPE.

Customer acknowledges and agrees that HPE may use resources outside the country of purchase for the delivery of these services.



## Data sheet

To the extent HPE process personal data on the Customer's behalf in the course of providing services, the HPE Data Privacy and Security Agreement Schedule — HPE Support and Professional Services found at [hpe.com/us/en/legal/customer-privacy.html](https://hpe.com/us/en/legal/customer-privacy.html) shall apply.

Activities such as, but not limited to, the following are excluded from this service:

- Service deployment on hardware not covered by an HPE warranty or service maintenance contract
- Service deployment on hardware covered by a third-party maintenance contract
- Services that, in the opinion of HPE, are required due to unauthorized attempts by third-party personnel to install, repair, maintain, or modify hardware, firmware, or software
- Services required due to causes external to the HPE maintained hardware or software
- Any services not clearly specified in this document
- Any services provided outside of HPE standard business hours may be subject to additional charges

## Ordering information

HPE Cooling Door and CDU Startup service must be ordered using the following service product numbers:

HA114A1#V16 — HPE Cooling Door Start-up SVC (in quantity of 1 per cooling door to install)

HA114A1#V17 — HPE Cray System CDU Start-up SVC (in quantity of 1 per CDU to install)

H7RD4A1 — HPE 1 Day Deploy Project Mgmt HPC SVC (the number of days per Customer site / installation project for the DPM activities may vary with system size and complexity; to be validated with the DPM team manager during the quote process)

## Learn more at

[HPE.com/services/lifecycleservices](https://HPE.com/services/lifecycleservices)



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