



Hewlett Packard
Enterprise

HPE Apollo d6500 Chassis

Maintenance and Service Guide

Abstract

This guide is for an experienced service technician. Hewlett Packard Enterprise assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels and are familiar with weight and stability precautions for rack installations.

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Customer self repair

Hewlett Packard Enterprise products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period Hewlett Packard Enterprise (or Hewlett Packard Enterprise service providers or service partners) identifies that the repair can be accomplished by the use of a CSR part, Hewlett Packard Enterprise will ship that part directly to you for replacement. There are two categories of CSR parts:

- **Mandatory**—Parts for which customer self repair is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.
- **Optional**—Parts for which customer self repair is optional. These parts are also designed for customer self repair. If, however, you require that Hewlett Packard Enterprise replace them for you, there may or may not be additional charges, depending on the type of warranty service designated for your product.

NOTE: Some Hewlett Packard Enterprise parts are not designed for customer self repair. In order to satisfy the customer warranty, Hewlett Packard Enterprise requires that an authorized service provider replace the part. These parts are identified as "No" in the Illustrated Parts Catalog.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the Hewlett Packard Enterprise Support Center and a technician will help you over the telephone. Hewlett Packard Enterprise specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to Hewlett Packard Enterprise. In cases where it is required to return the defective part to Hewlett Packard Enterprise, you must ship the defective part back to Hewlett Packard Enterprise within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in Hewlett Packard Enterprise billing you for the replacement. With a customer self repair, Hewlett Packard Enterprise will pay all shipping and part return costs and determine the courier/carrier to be used.

For more information about the Hewlett Packard Enterprise CSR program, contact your local service provider. For the North American program, go to the Hewlett Packard Enterprise CSR website (<http://www.hpe.com/support/selfrepair>).

Parts only warranty service

Your Hewlett Packard Enterprise Limited Warranty may include a parts only warranty service. Under the terms of parts only warranty service, Hewlett Packard Enterprise will provide replacement parts free of charge.

For parts only warranty service, CSR part replacement is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

Réparation par le client (CSR)

Les produits Hewlett Packard Enterprise comportent de nombreuses pièces CSR (Customer Self Repair = réparation par le client) afin de minimiser les délais de réparation et faciliter le remplacement des pièces défectueuses. Si pendant la période de diagnostic, Hewlett Packard Enterprise (ou ses partenaires ou mainteneurs agréés) détermine que la réparation peut être effectuée à l'aide d'une pièce CSR, Hewlett Packard Enterprise vous l'envoie directement. Il existe deux catégories de pièces CSR :

- **Obligatoire**—Pièces pour lesquelles la réparation par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.
- **Facultatif**—Pièces pour lesquelles la réparation par le client est facultative. Ces pièces sont également conçues pour permettre au client d'effectuer lui-même la réparation. Toutefois, si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, l'intervention peut ou non vous être facturée, selon le type de garantie applicable à votre produit.

REMARQUE: Certaines pièces Hewlett Packard Enterprise ne sont pas conçues pour permettre au client d'effectuer lui-même la réparation. Pour que la garantie puisse s'appliquer, Hewlett Packard Enterprise exige que le remplacement de la pièce soit effectué par un Mainteneur Agréé. Ces pièces sont identifiées par la mention "Non" dans le Catalogue illustré.

Les pièces CSR sont livrées le jour ouvré suivant, dans la limite des stocks disponibles et selon votre situation géographique. Si votre situation géographique le permet et que vous demandez une livraison le jour même ou dans les 4 heures, celle-ci vous sera facturée. Pour toute assistance, appelez le Centre d'assistance Hewlett Packard Enterprise pour qu'un technicien vous aide au téléphone. Dans les documents envoyés avec la pièce de rechange CSR, Hewlett Packard Enterprise précise s'il est nécessaire de lui retourner la pièce défectueuse. Si c'est le cas, vous devez le faire dans le délai indiqué, généralement cinq (5) jours ouvrés. La pièce et sa documentation doivent être retournées dans l'emballage fourni. Si vous ne retournez pas la pièce défectueuse, Hewlett Packard Enterprise se réserve le droit de vous facturer les coûts de remplacement. Dans le cas d'une pièce CSR, Hewlett Packard Enterprise supporte l'ensemble des frais d'expédition et de retour, et détermine la société de courses ou le transporteur à utiliser.

Pour plus d'informations sur le programme CSR de Hewlett Packard Enterprise, contactez votre Mainteneur Agréé local. Pour plus d'informations sur ce programme en Amérique du Nord, consultez le site Web Hewlett Packard Enterprise (<http://www.hpe.com/support/selfrepair>).

Service de garantie "pièces seules"

Votre garantie limitée Hewlett Packard Enterprise peut inclure un service de garantie "pièces seules". Dans ce cas, les pièces de rechange fournies par Hewlett Packard Enterprise ne sont pas facturées.

Dans le cadre de ce service, la réparation des pièces CSR par le client est obligatoire. Si vous demandez à Hewlett Packard Enterprise de remplacer ces pièces, les coûts de déplacement et main d'œuvre du service vous seront facturés.

Riparazione da parte del cliente

Per abbreviare i tempi di riparazione e garantire una maggiore flessibilità nella sostituzione di parti difettose, i prodotti Hewlett Packard Enterprise sono realizzati con numerosi componenti che possono essere riparati direttamente dal cliente (CSR, Customer Self Repair). Se in fase di diagnostica Hewlett Packard Enterprise (o un centro di servizi o di assistenza Hewlett Packard Enterprise) identifica il guasto come riparabile mediante un ricambio CSR, Hewlett Packard Enterprise lo spedisce direttamente al cliente per la sostituzione. Vi sono due categorie di parti CSR:

- **Obbligatorie**—Parti che devono essere necessariamente riparate dal cliente. Se il cliente ne affida la riparazione ad Hewlett Packard Enterprise, deve sostenere le spese di spedizione e di manodopera per il servizio.
- **Opzionali**—Parti la cui riparazione da parte del cliente è facoltativa. Si tratta comunque di componenti progettati per questo scopo. Se tuttavia il cliente ne richiede la sostituzione ad Hewlett Packard Enterprise, potrebbe dover sostenere spese aggiuntive a seconda del tipo di garanzia previsto per il prodotto.

NOTA: alcuni componenti Hewlett Packard Enterprise non sono progettati per la riparazione da parte del cliente. Per rispettare la garanzia, Hewlett Packard Enterprise richiede che queste parti siano sostituite da un centro di assistenza autorizzato. Tali parti sono identificate da un "No" nel Catalogo illustrato dei componenti.

In base alla disponibilità e alla località geografica, le parti CSR vengono spedite con consegna entro il giorno lavorativo seguente. La consegna nel giorno stesso o entro quattro ore è offerta con un supplemento di costo solo in alcune zone. In caso di necessità si può richiedere l'assistenza telefonica di un addetto del centro di supporto tecnico Hewlett Packard Enterprise. Nel materiale fornito con una parte di ricambio CSR, Hewlett Packard Enterprise specifica se il cliente deve restituire dei componenti. Qualora sia richiesta la resa ad Hewlett Packard Enterprise del componente difettoso, lo si deve spedire ad Hewlett Packard Enterprise entro un determinato periodo di tempo, generalmente cinque (5) giorni lavorativi. Il componente difettoso deve essere restituito con la documentazione associata nell'imballo di spedizione fornito. La mancata restituzione del componente può comportare la fatturazione del ricambio da parte di Hewlett Packard Enterprise. Nel caso di riparazione da parte del cliente, Hewlett Packard Enterprise sostiene tutte le spese di spedizione e resa e sceglie il corriere/vettore da utilizzare.

Per ulteriori informazioni sul programma CSR di Hewlett Packard Enterprise, contattare il centro di assistenza di zona. Per il programma in Nord America fare riferimento al sito Web (<http://www.hpe.com/support/selfrepair>).

Servizio di garanzia per i soli componenti

La garanzia limitata Hewlett Packard Enterprise può includere un servizio di garanzia per i soli componenti. Nei termini di garanzia del servizio per i soli componenti, Hewlett Packard Enterprise fornirà gratuitamente le parti di ricambio.

Per il servizio di garanzia per i soli componenti è obbligatoria la formula CSR che prevede la riparazione da parte del cliente. Se il cliente invece richiede la sostituzione ad Hewlett Packard Enterprise dovrà sostenere le spese di spedizione e di manodopera per il servizio.

Customer Self Repair

Hewlett Packard Enterprise Produkte enthalten viele CSR-Teile (Customer Self Repair), um Reparaturzeiten zu minimieren und höhere Flexibilität beim Austausch defekter Bauteile zu ermöglichen. Wenn Hewlett Packard Enterprise (oder ein Hewlett Packard Enterprise Servicepartner) bei der Diagnose feststellt, dass das Produkt mithilfe eines CSR-Teils repariert werden kann, sendet Ihnen Hewlett Packard Enterprise dieses Bauteil zum Austausch direkt zu. CSR-Teile werden in zwei Kategorien unterteilt:

- **Zwingend**—Teile, für die das Customer Self Repair-Verfahren zwingend vorgegeben ist. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.
- **Optional**—Teile, für die das Customer Self Repair-Verfahren optional ist. Diese Teile sind auch für Customer Self Repair ausgelegt. Wenn Sie jedoch den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen möchten, können bei diesem Service je nach den für Ihr Produkt vorgesehenen Garantiebedingungen zusätzliche Kosten anfallen.

HINWEIS: Einige Hewlett Packard Enterprise Teile sind nicht für Customer Self Repair ausgelegt. Um den Garantieanspruch des Kunden zu erfüllen, muss das Teil von einem Hewlett Packard Enterprise Servicepartner ersetzt werden. Im illustrierten Teilekatalog sind diese Teile mit „No“ bzw. „Nein“ gekennzeichnet.

CSR-Teile werden abhängig von der Verfügbarkeit und vom Lieferziel am folgenden Geschäftstag geliefert. Für bestimmte Standorte ist eine Lieferung am selben Tag oder innerhalb von vier Stunden gegen einen Aufpreis verfügbar. Wenn Sie Hilfe benötigen, können Sie das Hewlett Packard Enterprise

Support Center anrufen und sich von einem Mitarbeiter per Telefon helfen lassen. Den Materialien von Hewlett Packard Enterprise, die mit einem CSR-Ersatzteil geliefert werden, können Sie entnehmen, ob das defekte Teil an Hewlett Packard Enterprise zurückgeschickt werden muss. Wenn es erforderlich ist, das defekte Teil an Hewlett Packard Enterprise zurückzuschicken, müssen Sie dies innerhalb eines vorgegebenen Zeitraums tun, in der Regel innerhalb von fünf (5) Geschäftstagen. Das defekte Teil muss mit der zugehörigen Dokumentation in der Verpackung zurückgeschickt werden, die im Lieferumfang enthalten ist. Wenn Sie das defekte Teil nicht zurückschicken, kann Hewlett Packard Enterprise Ihnen das Ersatzteil in Rechnung stellen. Im Falle von Customer Self Repair kommt Hewlett Packard Enterprise für alle Kosten für die Lieferung und Rücksendung auf und bestimmt den Kurier-/Frachtdienst.

Weitere Informationen über das Hewlett Packard Enterprise Customer Self Repair Programm erhalten Sie von Ihrem Servicepartner vor Ort. Informationen über das CSR-Programm in Nordamerika finden Sie auf der Hewlett Packard Enterprise Website unter (<http://www.hpe.com/support/selfrepair>).

Parts-only Warranty Service (Garantieservice ausschließlich für Teile)

Ihre Hewlett Packard Enterprise Garantie umfasst möglicherweise einen Parts-only Warranty Service (Garantieservice ausschließlich für Teile). Gemäß den Bestimmungen des Parts-only Warranty Service stellt Hewlett Packard Enterprise Ersatzteile kostenlos zur Verfügung.

Für den Parts-only Warranty Service ist das CSR-Verfahren zwingend vorgegeben. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

Reparaciones del propio cliente

Los productos de Hewlett Packard Enterprise incluyen muchos componentes que el propio usuario puede reemplazar (Customer Self Repair, CSR) para minimizar el tiempo de reparación y ofrecer una mayor flexibilidad a la hora de realizar sustituciones de componentes defectuosos. Si, durante la fase de diagnóstico, Hewlett Packard Enterprise (o los proveedores o socios de servicio de Hewlett Packard Enterprise) identifica que una reparación puede llevarse a cabo mediante el uso de un componente CSR, Hewlett Packard Enterprise le enviará dicho componente directamente para que realice su sustitución. Los componentes CSR se clasifican en dos categorías:

- **Obligatorio**—Componentes cuya reparación por parte del usuario es obligatoria. Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.
- **Opcional**—Componentes cuya reparación por parte del usuario es opcional. Estos componentes también están diseñados para que puedan ser reparados por el usuario. Sin embargo, si precisa que Hewlett Packard Enterprise realice su sustitución, puede o no conllevar costes adicionales, dependiendo del tipo de servicio de garantía correspondiente al producto.

NOTA: Algunos componentes de Hewlett Packard Enterprise no están diseñados para que puedan ser reparados por el usuario. Para que el usuario haga valer su garantía, Hewlett Packard Enterprise pone como condición que un proveedor de servicios autorizado realice la sustitución de estos componentes. Dichos componentes se identifican con la palabra "No" en el catálogo ilustrado de componentes.

Según la disponibilidad y la situación geográfica, los componentes CSR se enviarán para que lleguen a su destino al siguiente día laborable. Si la situación geográfica lo permite, se puede solicitar la entrega en el mismo día o en cuatro horas con un coste adicional. Si precisa asistencia técnica, puede llamar al Centro de asistencia técnica de Hewlett Packard Enterprise y recibirá ayuda telefónica por parte de un técnico. Con el envío de materiales para la sustitución de componentes CSR, Hewlett Packard Enterprise especificará si los componentes defectuosos deberán devolverse a Hewlett Packard Enterprise. En aquellos casos en los que sea necesario devolver algún componente a Hewlett Packard Enterprise,

deberá hacerlo en el periodo de tiempo especificado, normalmente cinco días laborables. Los componentes defectuosos deberán devolverse con toda la documentación relacionada y con el embalaje de envío. Si no enviara el componente defectuoso requerido, Hewlett Packard Enterprise podrá cobrarle por el de sustitución. En el caso de todas sustituciones que lleve a cabo el cliente, Hewlett Packard Enterprise se hará cargo de todos los gastos de envío y devolución de componentes y escogerá la empresa de transporte que se utilice para dicho servicio.

Para obtener más información acerca del programa de Reparaciones del propio cliente de Hewlett Packard Enterprise, póngase en contacto con su proveedor de servicios local. Si está interesado en el programa para Norteamérica, visite la página web de Hewlett Packard Enterprise CSR (<http://www.hpe.com/support/selfrepair>).

Servicio de garantía exclusivo de componentes

La garantía limitada de Hewlett Packard Enterprise puede que incluya un servicio de garantía exclusivo de componentes. Según las condiciones de este servicio exclusivo de componentes, Hewlett Packard Enterprise le facilitará los componentes de repuesto sin cargo adicional alguno.

Para este servicio de garantía exclusivo de componentes, es obligatoria la sustitución de componentes por parte del usuario (CSR). Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

Customer Self Repair

Veel onderdelen in Hewlett Packard Enterprise producten zijn door de klant zelf te repareren, waardoor de reparatieduur tot een minimum beperkt kan blijven en de flexibiliteit in het vervangen van defecte onderdelen groter is. Deze onderdelen worden CSR-onderdelen (Customer Self Repair) genoemd. Als Hewlett Packard Enterprise (of een Hewlett Packard Enterprise Service Partner) bij de diagnose vaststelt dat de reparatie kan worden uitgevoerd met een CSR-onderdeel, verzendt Hewlett Packard Enterprise dat onderdeel rechtstreeks naar u, zodat u het defecte onderdeel daarmee kunt vervangen. Er zijn twee categorieën CSR-onderdelen:

- **Verplicht**—Onderdelen waarvoor reparatie door de klant verplicht is. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht.
- **Optioneel**—Onderdelen waarvoor reparatie door de klant optioneel is. Ook deze onderdelen zijn ontworpen voor reparatie door de klant. Als u echter Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, kunnen daarvoor extra kosten in rekening worden gebracht, afhankelijk van het type garantieservice voor het product.

OPMERKING: Sommige Hewlett Packard Enterprise onderdelen zijn niet ontwikkeld voor reparatie door de klant. In verband met de garantievoorwaarden moet het onderdeel door een geautoriseerde Service Partner worden vervangen. Deze onderdelen worden in de geïllustreerde onderdelencatalogus aangemerkt met "Nee".

Afhankelijk van de leverbaarheid en de locatie worden CSR-onderdelen verzonden voor levering op de eerstvolgende werkdag. Levering op dezelfde dag of binnen vier uur kan tegen meerkosten worden aangeboden, indien dit mogelijk is gezien de locatie. Indien assistentie is gewenst, belt u het Hewlett Packard Enterprise Support Center om via de telefoon ondersteuning van een technicus te ontvangen. Hewlett Packard Enterprise vermeldt in de documentatie bij het vervangende CSR-onderdeel of het defecte onderdeel aan Hewlett Packard Enterprise moet worden geretourneerd. Als het defecte onderdeel aan Hewlett Packard Enterprise moet worden teruggezonden, moet u het defecte onderdeel binnen een bepaalde periode, gewoonlijk vijf (5) werkdagen, retourneren aan Hewlett Packard Enterprise. Het defecte onderdeel moet met de bijbehorende documentatie worden geretourneerd in het meegeleverde verpakkingsmateriaal. Als u het defecte onderdeel niet terugzendt, kan Hewlett Packard

Enterprise u voor het vervangende onderdeel kosten in rekening brengen. Bij reparatie door de klant betaalt Hewlett Packard Enterprise alle verzendkosten voor het vervangende en geretourneerde onderdeel en kiest Hewlett Packard Enterprise zelf welke koerier/transportonderneming hiervoor wordt gebruikt.

Neem contact op met een Service Partner voor meer informatie over het Customer Self Repair programma van Hewlett Packard Enterprise. Informatie over Service Partners vindt u op de Hewlett Packard Enterprise website (<http://www.hpe.com/support/selfrepair>).

Garantieservice "Parts Only"

Het is mogelijk dat de Hewlett Packard Enterprise garantie alleen de garantieservice "Parts Only" omvat. Volgens de bepalingen van de Parts Only garantieservice zal Hewlett Packard Enterprise kosteloos vervangende onderdelen ter beschikking stellen.

Voor de Parts Only garantieservice is vervanging door CSR-onderdelen verplicht. Als u Hewlett Packard Enterprise verzoekt deze onderdelen voor u te vervangen, worden u voor deze service reiskosten en arbeidsloon in rekening gebracht

Reparo feito pelo cliente

Os produtos da Hewlett Packard Enterprise são projetados com muitas peças para reparo feito pelo cliente (CSR) de modo a minimizar o tempo de reparo e permitir maior flexibilidade na substituição de peças com defeito. Se, durante o período de diagnóstico, a Hewlett Packard Enterprise (ou fornecedores/parceiros da Hewlett Packard Enterprise) concluir que o reparo pode ser efetuado pelo uso de uma peça CSR, a Hewlett Packard Enterprise enviará a peça diretamente ao cliente. Há duas categorias de peças CSR:

- **Obrigatória**—Peças cujo reparo feito pelo cliente é obrigatório. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.
- **Opcional**—Peças cujo reparo feito pelo cliente é opcional. Essas peças também são projetadas para o reparo feito pelo cliente. No entanto, se desejar que a Hewlett Packard Enterprise as substitua, pode haver ou não a cobrança de taxa adicional, dependendo do tipo de serviço de garantia destinado ao produto.

OBSERVAÇÃO: Algumas peças da Hewlett Packard Enterprise não são projetadas para o reparo feito pelo cliente. A fim de cumprir a garantia do cliente, a Hewlett Packard Enterprise exige que um técnico autorizado substitua a peça. Essas peças estão identificadas com a marca "No" (Não), no catálogo de peças ilustrado.

Conforme a disponibilidade e o local geográfico, as peças CSR serão enviadas no primeiro dia útil após o pedido. Onde as condições geográficas permitirem, a entrega no mesmo dia ou em quatro horas pode ser feita mediante uma taxa adicional. Se precisar de auxílio, entre em contato com o Centro de suporte técnico da Hewlett Packard Enterprise para que um técnico o ajude por telefone. A Hewlett Packard Enterprise especifica nos materiais fornecidos com a peça CSR de reposição se a peça com defeito deve ser devolvida à Hewlett Packard Enterprise. Nos casos em que isso for necessário, é preciso enviar a peça com defeito à Hewlett Packard Enterprise, você deverá enviar a peça com defeito de volta para a Hewlett Packard Enterprise dentro do período de tempo definido, normalmente em 5 (cinco) dias úteis. A peça com defeito deve ser enviada com a documentação correspondente no material de transporte fornecido. Caso não o faça, a Hewlett Packard Enterprise poderá cobrar a reposição. Para as peças de reparo feito pelo cliente, a Hewlett Packard Enterprise paga todas as despesas de transporte e de devolução da peça e determina a transportadora/serviço postal a ser utilizado.

Para obter mais informações sobre o programa de reparo feito pelo cliente da Hewlett Packard Enterprise, entre em contato com o fornecedor de serviços local. Para o programa norte-americano, visite o site da Hewlett Packard Enterprise (<http://www.hpe.com/support/selfrepair>).

Serviço de garantia apenas para peças

A garantia limitada da Hewlett Packard Enterprise pode incluir um serviço de garantia apenas para peças. Segundo os termos do serviço de garantia apenas para peças, a Hewlett Packard Enterprise fornece as peças de reposição sem cobrar nenhuma taxa.

No caso desse serviço, a substituição de peças CSR é obrigatória. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

カスタマーセルフリペア

修理時間を短縮し、故障部品の交換における高い柔軟性を確保するために、Hewlett Packard Enterprise製品には多数のカスタマーセルフリペア（CSR）部品があります。診断の際に、CSR部品を使用すれば修理ができるとHewlett Packard Enterprise（Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店）が判断した場合、Hewlett Packard Enterpriseはその部品を直接、お客様に発送し、お客様に交換していただきます。CSR部品には以下の2種類があります。

- **必須** - カスタマーセルフリペアが必須の部品。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様に請求されます。
- **任意** - カスタマーセルフリペアが任意である部品。この部品もカスタマーセルフリペア用です。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、お買い上げの製品に適用される保証サービス内容の範囲内においては、別途費用を負担していただくことなく保証サービスを受けることができます。

注：Hewlett Packard Enterprise製品の一部の部品は、カスタマーセルフリペアの対象外です。製品の保証を継続するためには、Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店による交換作業が必須となります。部品カタログには、当該部品がカスタマーセルフリペア除外品である旨が記載されています。

部品供給が可能な場合、地域によっては、CSR部品を翌営業日に届くように発送します。また、地域によっては、追加費用を負担いただくことにより同日または4時間以内に届くように発送することも可能な場合があります。サポートが必要なときは、Hewlett Packard Enterpriseサポートセンターに電話していただければ、技術者が電話でアドバイスします。交換用のCSR部品または同梱物には、故障部品をHewlett Packard Enterpriseに返送する必要があるかどうかが表示されています。故障部品をHewlett Packard Enterpriseに返送する必要がある場合は、指定期限内（通常は5営業日以内）に故障部品をHewlett Packard Enterpriseに返送してください。故障部品を返送する場合は、届いた時の梱包箱に関連書類とともにに入れてください。故障部品を返送しない場合、Hewlett Packard Enterpriseから部品費用が請求されます。カスタマーセルフリペアの際には、Hewlett Packard Enterpriseは送料および部品返送費を全額負担し、使用する宅配便会社や運送会社を指定します。

部品のみ保証サービス

Hewlett Packard Enterprise保証サービスには、部品のみ保証サービスが適用される場合があります。このサービスでは、交換部品は無償で提供されます。

部品のみ保証サービスにおいては、CSR部品をお客様により交換作業していただくことが必須となります。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様のご負担となります。

客户自行维修

Hewlett Packard Enterprise 产品提供许多客户自行维修 (CSR) 部件，以尽可能缩短维修时间和在更换缺陷部件方面提供更大的灵活性。如果在诊断期间 Hewlett Packard Enterprise (或 Hewlett Packard Enterprise 服务提供商或服务合作伙伴) 确定可以通过使用 CSR 部件完成维修，Hewlett Packard Enterprise 将直接把该部件发送给您进行更换。有两类 CSR 部件：

- **强制性的** — 要求客户必须自行维修的部件。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。
- **可选的** — 客户可以选择是否自行维修的部件。这些部件也是为客户自行维修设计的。不过，如果您要求 Hewlett Packard Enterprise 为您更换这些部件，则根据为您的产品指定的保修服务类型，Hewlett Packard Enterprise 可能收取或不再收取任何附加费用。

注：某些 Hewlett Packard Enterprise 部件的设计并未考虑客户自行维修。为了满足客户保修的需要，Hewlett Packard Enterprise 要求授权服务提供商更换相关部件。这些部件在部件图解目录中标记为“否”。

CSR 部件将在下一个工作日发运 (取决于备货情况和允许的地理范围)。在允许的地理范围内，可在当天或四小时内发运，但要收取额外费用。如果需要帮助，您可以致电 Hewlett Packard Enterprise 技术支持中心，将会有技术人员通过电话为您提供帮助。Hewlett Packard Enterprise 会在随更换的 CSR 部件发运的材料中指明是否必须将有缺陷的部件返还给 Hewlett Packard Enterprise。如果要求您将有缺陷的部件返还给 Hewlett Packard Enterprise，那么您必须在规定的期限内 (通常是五 (5) 个工作日) 将缺陷部件发给 Hewlett Packard Enterprise。有缺陷的部件必须随所提供的发运材料中的相关文件一起返还。如果未能送还有缺陷的部件，Hewlett Packard Enterprise 可能会要求您支付更换费用。客户自行维修时，Hewlett Packard Enterprise 将承担所有相关运输和部件返回费用，并指定快递商/承运商。

有关 Hewlett Packard Enterprise 客户自行维修计划的详细信息，请与您当地的服务提供商联系。有关北美地区的计划，请访问 Hewlett Packard Enterprise 网站 (<http://www.hpe.com/support/selfrepair>)。

仅部件保修服务

您的 Hewlett Packard Enterprise 有限保修服务可能涉及仅部件保修服务。根据仅部件保修服务条款的规定，Hewlett Packard Enterprise 将免费提供更换的部件。

仅部件保修服务要求进行 CSR 部件更换。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。

客戶自行維修

Hewlett Packard Enterprise 產品設計了許多「客戶自行維修」(CSR) 的零件以減少維修時間，並且使得更換瑕疵零件時能有更大的彈性。如果在診斷期間，Hewlett Packard Enterprise (或 Hewlett Packard Enterprise 服務供應商或維修夥伴) 辨認出此項維修工作可以藉由使用 CSR 零件來完成，則 Hewlett Packard Enterprise 將直接寄送該零件給您作更換。CSR 零件分為兩種類別：

- **強制的** — 客戶自行維修所使用的零件是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。
- **選購的** — 客戶自行維修所使用的零件是選購的。這些零件也設計用於客戶自行維修之用。不過，如果您要求 Hewlett Packard Enterprise 為您更換，則可能需要也可能不需要負擔額外的費用，端視針對此產品指定的保固服務類型而定。

備註：某些 Hewlett Packard Enterprise 零件沒有消費者可自行維修的設計。為符合客戶保固，Hewlett Packard Enterprise 需要授權的服務供應商更換零件。這些零件在圖示的零件目錄中，被標示為「否」。

基於材料取得及環境允許的情況下，CSR 零件將於下一個工作日以快遞寄送。在環境的允許下當天或四小時內送達，則可能需要額外的費用。若您需要協助，可致電 Hewlett Packard Enterprise 支援中心，會有一位技術人員透過電話來協助您。不論損壞的零件是否必須退回，Hewlett Packard Enterprise 皆會在與 CSR 替換零件一起運送的材料中註明。若要將損壞的零件退回 Hewlett Packard Enterprise，您必須在指定的一段時間內 (通常為五 (5) 個工作天)，將損壞的零件寄回 Hewlett Packard Enterprise。損壞的零件必須與寄送資料中隨附的相關技術文件一併退還。如果無法退還損壞的零件，Hewlett Packard Enterprise 可能要向您收取替換費用。針對客戶自行維修情形，Hewlett Packard Enterprise 將負責所有運費及零件退還費用，並指定使用何家快遞/貨運公司。

如需 Hewlett Packard Enterprise 的 CSR 方案詳細資訊，請連絡您當地的服務供應商。至於北美方案，請參閱 Hewlett Packard Enterprise 的 CSR 網站repair (<http://www.hpe.com/support/selfrepair>)。

僅限零件的保固服務

您的「Hewlett Packard Enterprise 有限保固」可能包含僅限零件的保固服務。在僅限零件的保固服務情況下，Hewlett Packard Enterprise 將免費提供替換零件。

針對僅限零件的保固服務，CSR 零件替換是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。

고객 셀프 수리

Hewlett Packard Enterprise 제품은 수리 시간을 최소화하고 결함이 있는 부품 교체 시 더욱 용동성을 발휘할 수 있도록 하기 위해 고객 셀프 수리(CSR) 부품을 다량 사용하여 설계되었습니다. 진단 기간 동안 Hewlett Packard Enterprise(또는 Hewlett Packard Enterprise 서비스 공급업체 또는 서비스 협력업체)에서 CSR 부품을 사용하여 수리가 가능하다고 판단되면 Hewlett Packard Enterprise는 해당 부품을 바로 사용자에게 보내어 사용자가 교체할 수 있도록 합니다. CSR 부품에는 두 가지 종류가 있습니다.

- 필수 - 고객 셀프 수리가 의무 사항인 필수 부품. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.
- 선택 사항 - 고객 셀프 수리가 선택 사항인 부품. 이 부품들도 고객 셀프 수리가 가능하도록 설계되었습니다. 하지만 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 사용자가 구입한 제품에 해당하는 보증 서비스 유형에 따라 추가 비용 없이 교체가 가능할 수 있습니다.

참고: 일부 Hewlett Packard Enterprise 부품은 고객 셀프 수리가 불가능하도록 설계되었습니다. Hewlett Packard Enterprise는 만족스러운 고객 보증을 위해 공인 서비스 제공업체를 통해 부품을 교체하도록 하고 있습니다. 이러한 부품들은 Illustrated Parts Catalog에 “No”라고 표시되어 있습니다.

CSR 부품은 재고 상태와 지리적 조건이 허용하는 경우 다음 영업일 납품이 가능하도록 배송이 이루어집니다. 지리적 조건이 허용하는 경우 추가 비용이 청구되는 조건으로 당일 또는 4시간 배송이 가능할 수도 있습니다. 도움이 필요하시면 Hewlett Packard Enterprise Support Center로 전화하십시오. 전문 기술자가 전화로 도움을 줄 것입니다. Hewlett Packard Enterprise는 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는지 여부를 CSR 교체 부품과 함께 배송된 자료에 지정합니다. 결함이 발생한 부품을 Hewlett Packard Enterprise로 반환해야 하는 경우에는 지정된 기간 내(통상 영업일 기준 5일)에 Hewlett Packard Enterprise로 반환해야 합니다. 이때 결함이 발생한 부품은 제공된 포장 재료에 넣어 관련 설명서와 함께 반환해야 합니다. 결함이 발생한 부품을 반환하지 않는 경우 Hewlett Packard Enterprise가 교체 부품에 대해 비용을 청구할 수 있습니다. 고객 셀프 수리의 경우, Hewlett Packard Enterprise는 모든 운송 및 부품 반환 비용을 부담하며 이용할 운송업체 및 택배 서비스를 결정합니다.

Hewlett Packard Enterprise CSR 프로그램에 대한 자세한 내용은 가까운 서비스 제공업체에 문의하십시오. 북미 지역의 프로그램에 대해서는 Hewlett Packard Enterprise CSR 웹 사이트(<http://www.hpe.com/support/selfrepair>)를 참조하십시오.

부품 제공 보증 서비스

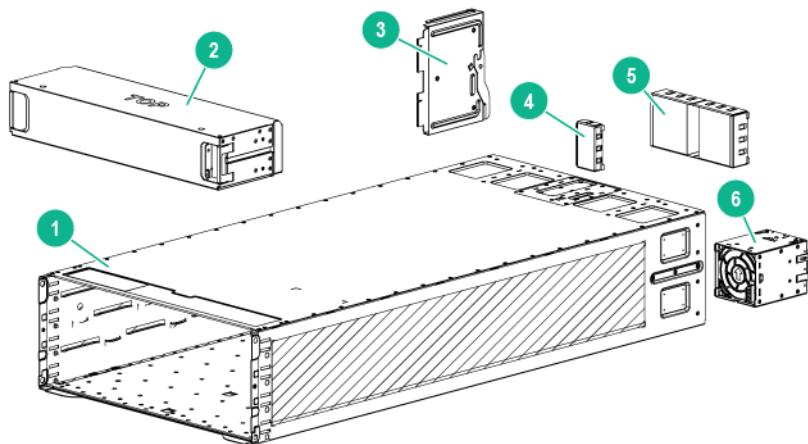
Hewlett Packard Enterprise 제한 보증에는 부품 제공 보증 서비스가 포함될 수 있습니다. 이러한 경우 Hewlett Packard Enterprise는 부품 제공 보증 서비스의 조건에 따라 교체 부품만을 무료로 제공합니다.

부품 제공 보증 서비스 제공 시 CSR 부품 교체는 의무 사항입니다. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 이 서비스에 대한 출장비 및 작업비가 청구됩니다.

Illustrated parts catalog

Chassis system and mechanical components

Hewlett Packard Enterprise continually improves and changes product parts. For complete and current supported parts information, see the Hewlett Packard Enterprise PartSurfer website (<http://www.hpe.com/info/partssurfer>).



Item	Description	Spare part number	Customer self repair (on page 5)
1	HPE Apollo d6500 Chassis	—	—
2	Server bay blank	869997-001	Mandatory ¹
3	Chassis management module board	867406-001	Mandatory ¹
4	Power cable bay blank	—	—
5	Fan bay blank	—	—
6	Fan module	747037-001	Mandatory ¹
7	Chassis handle*	768486-001	Mandatory ¹
8	4U Chassis rail kit*	600663-001	Mandatory ¹

*Not shown

¹Mandatory—Parts for which customer self repair is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

²Optional—Parts for which customer self repair is optional. These parts are also designed for customer self repair. If, however, you require that Hewlett Packard Enterprise replace them for you, there may or may not be additional charges, depending on the type of warranty service designated for your product.

³No—Some Hewlett Packard Enterprise parts are not designed for customer self repair. In order to satisfy the customer warranty, Hewlett Packard Enterprise requires that an authorized service provider replace the part. These parts are identified as "No" in the Illustrated Parts Catalog.

¹Obligatoire—Pièces pour lesquelles le client doit procéder lui-même aux réparations. Si vous demandez à Hewlett Packard Enterprise de procéder au remplacement de ces pièces, les frais de transport et de main d'œuvre pour ce service vous seront facturés.

²Facultatif—Pièces pour lesquelles une réparation par le client est facultative. Ces pièces sont également conçues pour que le client puisse procéder lui-même aux réparations. Cependant, les frais supplémentaires engendrés par le

remplacement de ces pièces par Hewlett Packard Enterprise dépendent du type de service de garantie désigné pour votre produit.

³Non—Certains pièces Hewlett Packard Enterprise ne sont pas conçues pour être remplacées par le client. Afin de se conformer aux exigences de la garantie la garantie du client, Hewlett Packard Enterprise demande à un fournisseur de services agréé de procéder au remplacement de la pièce. Ces pièces sont signalées par le mot « Non » dans le Catalogue de pièces illustré.

¹Obbligatorio—Parti per le quali il cliente è tenuto a effettuare autonomamente la riparazione. Se si richiede l'intervento di Hewlett Packard Enterprise per la sostituzione di queste parti, al cliente verranno addebitate le spese di viaggio e manodopera dell'operazione.

²Facoltativo—Parti per le quali la riparazione in autonomia da parte del cliente è facoltativa. Queste parti sono progettate per consentire anche la riparazione da parte del cliente. Tuttavia, se il cliente richiede l'intervento di Hewlett Packard Enterprise per la sostituzione, potrebbero essere addebitate spese aggiuntive a seconda del tipo di garanzia in assistenza previsto per il prodotto.

³No—Alcune parti Hewlett Packard Enterprise non sono progettate la riparazione in autonomia da parte del cliente. In base a quanto previsto dalla garanzia per il cliente, Hewlett Packard Enterprise richiede l'intervento di un tecnico autorizzato per la sostituzione della parte. Queste parti sono contrassegnate con "No" nel catalogo parti illustrato.

¹Zwingend—Teile, für die das Customer Self Repair-Verfahren zwingend vorgegeben ist. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

²Optional—Teile, für die das Customer Self Repair-Verfahren optional ist. Diese Teile sind auch für Customer Self Repair ausgelegt. Wenn Sie jedoch den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen möchten, können bei diesem Service je nach den für Ihr Produkt vorgesehenen Garantiebedingungen zusätzliche Kosten anfallen.

³Nein—Einige Hewlett Packard Enterprise Teile sind nicht für Customer Self Repair ausgelegt. Um den Garantieanspruch des Kunden zu erfüllen, muss das Teil von einem Hewlett Packard Enterprise Servicepartner ersetzt werden. Im illustrierten Teilekatalog sind diese Teile mit „No“ bzw. „Nein“ gekennzeichnet.

¹Obligatorio—Componentes cuya reparación por parte del usuario es obligatoria. Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

²Opcional—Componentes cuya reparación por parte del usuario es opcional. Estos componentes también están diseñados para que puedan ser reparados por el usuario. Sin embargo, si precisa que Hewlett Packard Enterprise realice su sustitución, puede o no conllevar costes adicionales, dependiendo del tipo de servicio de garantía correspondiente al producto.

³No—Algunos componentes de Hewlett Packard Enterprise no están diseñados para que puedan ser reparados por el usuario. Para que el usuario haga valer su garantía, Hewlett Packard Enterprise pone como condición que un proveedor de servicios autorizado realice la sustitución de estos componentes. Dichos componentes se identifican con la palabra "No" en el catálogo ilustrado de componentes.

¹Verplicht—Onderdelen die de klant zelf moet vervangen. Als u Hewlett Packard Enterprise vraagt deze onderdelen te vervangen, worden er reis- en arbeidskosten voor deze service in rekening gebracht.

²Optioneel—Onderdelen die de klant zelf kan vervangen. Deze onderdelen zijn ook ontworpen om door de klant zelf te worden vervangen. Als u Hewlett Packard Enterprise verzoekt om deze te vervangen, kan het zijn dat hiervoor extra kosten in rekening worden gebracht, afhankelijk van het soort garantie dat op uw product van toepassing is.

³Geen—Sommige onderdelen van Hewlett Packard Enterprise zijn niet ontworpen om door de klant zelf te worden vervangen. Om te voldoen aan de garantievoorwaarden eist Hewlett Packard Enterprise dat een geautoriseerde serviceverlener het onderdeel vervangt. Deze onderdelen worden aangeduid met 'Geen' in de geïllustreerde onderdelencatalogus.

¹Obrigatório—Peças cujo reparo feito pelo cliente é obrigatório. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

²Opcional—Peças cujo reparo feito pelo cliente é opcional. Essas peças também são projetadas para o reparo feito pelo cliente. No entanto, se desejar que a Hewlett Packard Enterprise as substitua, pode haver ou não a cobrança de taxa adicional, dependendo do tipo de serviço de garantia destinado ao produto.

³Não—Algumas peças da Hewlett Packard Enterprise não são projetadas para o reparo feito pelo cliente. A fim de cumprir a garantia do cliente, a Hewlett Packard Enterprise exige que um técnico autorizado substitua a peça. Essas peças estão identificadas com a marca "No" (Não), no catálogo de peças ilustrado.

¹Mandatory : 必須 — カスタマーセルフリペアが必須の部品。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、その修理サービスに関する交通費および人件費がお客様に請求されます。

²Optional : 任意 — カスタマーセルフリペアが任意である部品。この部品もカスタマーセルフリペア用です。当該部品について、もしもお客様がHewlett Packard Enterpriseに交換作業を依頼される場合には、お買い上げの製品に適用される保証サービス内容の範囲内においては、別途費用を負担していただくことなく保証サービスを受けることができます。

³No : 除外 — Hewlett Packard Enterprise製品の一部の部品は、カスタマーセルフリペアの対象外です。製品の保証を継続するためには、Hewlett Packard EnterpriseまたはHewlett Packard Enterprise正規保守代理店による交換作業が必須となります。部品カタログには、当該部品がカスタマーセルフリペア除外品である旨が記載されています。

¹Mandatory — 客户必须自行维修的部件。如果您请求 Hewlett Packard Enterprise 更换这些部件，则必须为该服务支付差旅费和人工费用。

²Optional — 客户可以选择是否自行维修的部件。这些部件也是为客户自行维修设计的。不过，如果您要求 Hewlett Packard Enterprise 为您更换这些部件，则根据为您的产品指定的保修服务类型，Hewlett Packard Enterprise 可能收取或不再收取任何附加费用。

³No — 某些 Hewlett Packard Enterprise 部件的设计并未考虑客户自行维修。为了满足客户保修的需要，Hewlett Packard Enterprise 要求授权服务提供商更换相关部件。这些部件在部件图解目录中标记为“否”。

¹Mandatory — 客户自行维修所使用的零件是强制性的。如果您要求 Hewlett Packard Enterprise 更换这些零件，Hewlett Packard Enterprise 将会向您收取此服务所需的外出费用与劳动成本。

²Optional — 客户自行维修所使用的零件是選購的。這些零件也設計用於客戶自行維修之用。不過，如果您要求 Hewlett Packard Enterprise 為您更換，則可能需要也可能不需要負擔額外的費用，端視針對此產品指定的保固服務類型而定。

³No — 某些 Hewlett Packard Enterprise 零件沒有消費者可自行維修的設計。為符合客戶保固，Hewlett Packard Enterprise 需要授權的服務供應商更換零件。這些零件在圖示的零件目錄中，被標示為「否」。

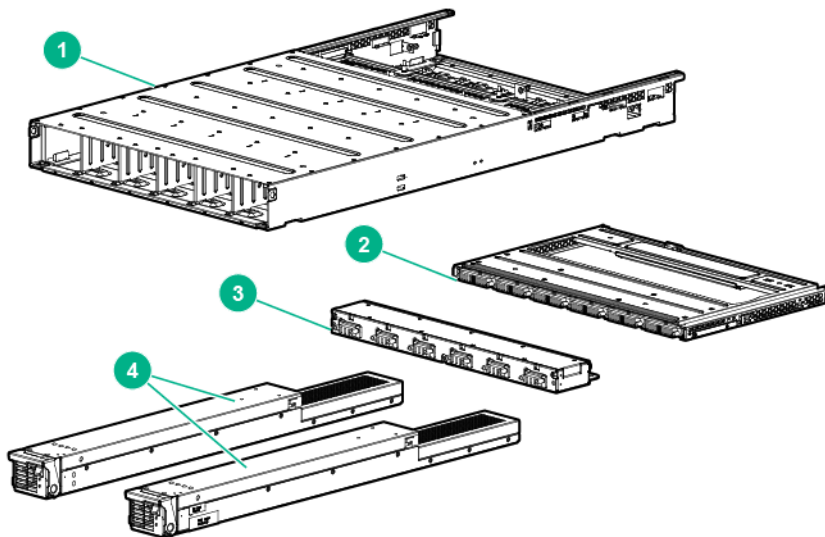
¹Mandatory — 고객 셀프 수리가 의무 사항인 필수 부품. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 해당 서비스에 대한 출장비 및 작업비가 청구됩니다.

²Optional — 고객 셀프 수리가 선택 사항인 부품. 이러한 부품들도 고객 셀프 수리가 가능하도록 설계되었습니다. 하지만 사용자가 Hewlett Packard Enterprise에 이러한 부품의 교체를 요청할 경우 사용자가 구입한 제품에 해당하는 보증 서비스 유형에 따라 추가 비용 없이 교체가 가능할 수 있습니다.

³No — 일부 Hewlett Packard Enterprise 부품은 고객 셀프 수리가 불가능하도록 설계되었습니다. Hewlett Packard Enterprise는 만족스러운 고객 보증을 위해 공인 서비스 제공업체를 통해 부품을 교체하도록 요구하고 있습니다. 이러한 부품들은 Illustrated Parts Catalog에 "No"라고 표시되어 있습니다.

Power shelf components

Hewlett Packard Enterprise continually improves and changes product parts. For complete and current supported parts information, see the Hewlett Packard Enterprise PartSurfer website (<http://www.hpe.com/info/partssurfer>).



Item	Description	Spare part number	Customer self repair (on page 5)
1	Power shelf	—	—
2	Power management module	761824-001	Mandatory ¹
3	AC input module	—	—

Item	Description	Spare part number	Customer self repair (on page 5)
	a) Single-phase module	413494-001	Mandatory ¹
	b) Three-phase module	413495-001	Mandatory ¹
	c) Three-phase module (non-US)	413496-001	Mandatory ¹
4	Power supply	—	—
	a) 2650W Platinum Power Supply	733830-001	Mandatory ¹
5	Power cables*	—	—
	a) DC, 116.84 cm (46.00 in)	746090-001	Mandatory ¹
	b) DC, 98.43 cm (38.75 in)	746088-001	Mandatory ¹
	c) DC, 86.36 cm (34.00 in)	746087-001	Mandatory ¹
6	Power management cable*	867587-001	Mandatory ¹
7	Power cable holder*	869998-001	Mandatory ¹
8	Power shelf rack rail kit*	747330-001	Mandatory ¹

*Not shown

¹Mandatory—Parts for which customer self repair is mandatory. If you request Hewlett Packard Enterprise to replace these parts, you will be charged for the travel and labor costs of this service.

²Optional—Parts for which customer self repair is optional. These parts are also designed for customer self repair. If, however, you require that Hewlett Packard Enterprise replace them for you, there may or may not be additional charges, depending on the type of warranty service designated for your product.

³No—Some Hewlett Packard Enterprise parts are not designed for customer self repair. In order to satisfy the customer warranty, Hewlett Packard Enterprise requires that an authorized service provider replace the part. These parts are identified as "No" in the Illustrated Parts Catalog.

¹Obligatoire—Pièces pour lesquelles le client doit procéder lui-même aux réparations. Si vous demandez à Hewlett Packard Enterprise de procéder au remplacement de ces pièces, les frais de transport et de main d'œuvre pour ce service vous seront facturés.

²Facultatif—Pièces pour lesquelles une réparation par le client est facultative. Ces pièces sont également conçues pour que le client puisse procéder lui-même aux réparations. Cependant, les frais supplémentaires engendrés par le remplacement de ces pièces par Hewlett Packard Enterprise dépendent du type de service de garantie désigné pour votre produit.

³Non—Certaines pièces Hewlett Packard Enterprise ne sont pas conçues pour être remplacées par le client. Afin de se conformer aux exigences de la garantie la garantie du client, Hewlett Packard Enterprise demande à un fournisseur de services agréé de procéder au remplacement de la pièce. Ces pièces sont signalées par le mot « Non » dans le Catalogue de pièces illustré.

¹Obbligatorio—Parti per le quali il cliente è tenuto a effettuare autonomamente la riparazione. Se si richiede l'intervento di Hewlett Packard Enterprise per la sostituzione di queste parti, al cliente verranno addebitate le spese di viaggio e manodopera dell'operazione.

²Facoltativo—Parti per le quali la riparazione in autonomia da parte del cliente è facoltativa. Queste parti sono progettate per consentire anche la riparazione da parte del cliente. Tuttavia, se il cliente richiede l'intervento di Hewlett Packard Enterprise per la sostituzione, potrebbero essere addebitate spese aggiuntive a seconda del tipo di garanzia in assistenza previsto per il prodotto.

³No—Alcune parti Hewlett Packard Enterprise non sono progettate la riparazione in autonomia da parte del cliente. In base a quanto previsto dalla garanzia per il cliente, Hewlett Packard Enterprise richiede l'intervento di un tecnico autorizzato per la sostituzione della parte. Queste parti sono contrassegnate con "No" nel catalogo parti illustrato.

¹Zwingend—Teile, für die das Customer Self Repair-Verfahren zwingend vorgegeben ist. Wenn Sie den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen, werden Ihnen die Anfahrt- und Arbeitskosten für diesen Service berechnet.

²Optional—Teile, für die das Customer Self Repair-Verfahren optional ist. Diese Teile sind auch für Customer Self Repair ausgelegt. Wenn Sie jedoch den Austausch dieser Teile von Hewlett Packard Enterprise vornehmen lassen möchten, können bei diesem Service je nach den für Ihr Produkt vorgesehenen Garantiebedingungen zusätzliche Kosten anfallen.

³Nein—Einige Hewlett Packard Enterprise Teile sind nicht für Customer Self Repair ausgelegt. Um den Garantieanspruch des Kunden zu erfüllen, muss das Teil von einem Hewlett Packard Enterprise Servicepartner ersetzt werden. Im illustrierten Teilekatalog sind diese Teile mit „No“ bzw. „Nein“ gekennzeichnet.

¹Obligatorio—Componentes cuya reparación por parte del usuario es obligatoria. Si solicita a Hewlett Packard Enterprise que realice la sustitución de estos componentes, tendrá que hacerse cargo de los gastos de desplazamiento y de mano de obra de dicho servicio.

²Opcional—Componentes cuya reparación por parte del usuario es opcional. Estos componentes también están diseñados para que puedan ser reparados por el usuario. Sin embargo, si precisa que Hewlett Packard Enterprise realice su sustitución, puede o no conllevar costes adicionales, dependiendo del tipo de servicio de garantía correspondiente al producto.

³No—Algunos componentes de Hewlett Packard Enterprise no están diseñados para que puedan ser reparados por el usuario. Para que el usuario haga valer su garantía, Hewlett Packard Enterprise pone como condición que un proveedor de servicios autorizado realice la sustitución de estos componentes. Dichos componentes se identifican con la palabra "No" en el catálogo ilustrado de componentes.

¹Verplicht—Onderdelen die de klant zelf moet vervangen. Als u Hewlett Packard Enterprise vraagt deze onderdelen te vervangen, worden er reis- en arbeidskosten voor deze service in rekening gebracht.

²Optioneel—Onderdelen die de klant zelf kan vervangen. Deze onderdelen zijn ook ontworpen om door de klant zelf te worden vervangen. Als u Hewlett Packard Enterprise verzoekt om deze te vervangen, kan het zijn dat hiervoor extra kosten in rekening worden gebracht, afhankelijk van het soort garantie dat op uw product van toepassing is.

³Geen—Sommige onderdelen van Hewlett Packard Enterprise zijn niet ontworpen om door de klant zelf te worden vervangen. Om te voldoen aan de garanti voorwaarden eist Hewlett Packard Enterprise dat een geautoriseerde serviceverlener het onderdeel vervangt. Deze onderdelen worden aangeduid met 'Geen' in de geïllustreerde onderdelencatalogus.

¹Obrigatório—Peças cujo reparo feito pelo cliente é obrigatório. Se desejar que a Hewlett Packard Enterprise substitua essas peças, serão cobradas as despesas de transporte e mão-de-obra do serviço.

²Opcional—Peças cujo reparo feito pelo cliente é opcional. Essas peças também são projetadas para o reparo feito pelo cliente. No entanto, se desejar que a Hewlett Packard Enterprise as substitua, pode haver ou não a cobrança de taxa adicional, dependendo do tipo de serviço de garantia destinado ao produto.

³Não—Algumas peças da Hewlett Packard Enterprise não são projetadas para o reparo feito pelo cliente. A fim de cumprir a garantia do cliente, a Hewlett Packard Enterprise exige que um técnico autorizado substitua a peça. Essas peças estão identificadas com a marca "No" (Não), no catálogo de peças ilustrado.

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¹Mandatory — 客戶自行維修所使用的零件是強制性的。如果您要求 Hewlett Packard Enterprise 更換這些零件，Hewlett Packard Enterprise 將會向您收取此服務所需的外出費用與勞動成本。

²Optional — 客戶自行維修所使用的零件是選購的。這些零件也設計用於客戶自行維修之用。不過，如果您要求 Hewlett Packard Enterprise 為您更換，則可能需要也可能不需要負擔額外的費用，端視針對此產品指定的保固服務類型而定。

³No — 某些 Hewlett Packard Enterprise 零件沒有消費者可自行維修的設計。為符合客戶保固，Hewlett Packard Enterprise 需要授權的服務供應商更換零件。這些零件在圖示的零件目錄中，被標示為「否」。

¹Mandatory — 고객 셀프 수리가 의무 사항인 필수 부품. 사용자가 Hewlett Packard Enterprise에 이 부품의 교체를 요청할 경우 해당 서비스에 대한 출장비 및 작업비가 청구됩니다.

²Optional — 고객 셀프 수리가 선택 사항인 부품. 이러한 부품들도 고객 셀프 수리가 가능하도록 설계되었습니다. 하지만 사용자가 Hewlett Packard Enterprise에 이러한 부품의 교체를 요청할 경우 사용자가 구입한 제품에 해당하는 보증 서비스 유형에 따라 추가 비용 없이 교체가 가능할 수 있습니다.

³No — 일부 Hewlett Packard Enterprise 부품은 고객 셀프 수리가 불가능하도록 설계되었습니다. Hewlett Packard Enterprise는 만족스러운 고객 보증을 위해 공인 서비스 제공업체를 통해 부품을 교체하도록 요구하고 있습니다. 이러한 부품들은 Illustrated Parts Catalog에 "No"라고 표시되어 있습니다.

Removal and replacement procedures

Required tools

You need the following items for some procedures:

- T-10 Torx screwdriver
- T-15 Torx screwdriver

Preparation procedures

To access some components and perform certain service procedures, you might need to perform one or more of the following procedures:

- Power down the server (on page 20).
- Remove the accelerator tray power cables from the chassis (on page 21).
- Remove the server from the chassis ("[Removing the server from the chassis](#)" on page 21).
- Remove the chassis from the rack (on page 24).
- Remove the chassis management module (on page 22).
- Remove the fans ("[Remove the fan](#)" on page 29).

Power down the server

Before powering down the server for any upgrade or maintenance procedures, perform a backup of critical server data and programs.



IMPORTANT: When the server is in standby mode, auxiliary power is still being provided to the system.

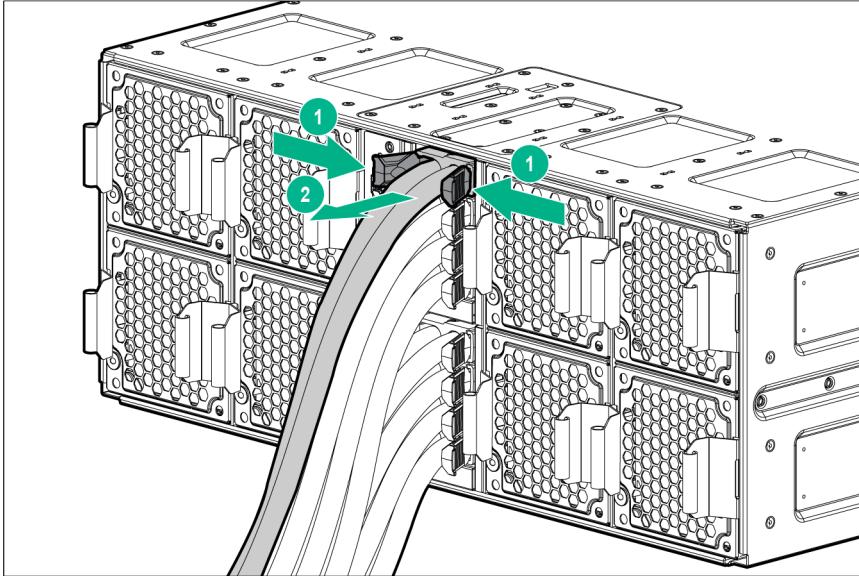
To power down the server, use one of the following methods:

- Press and release the Power On/Standby button.
This method initiates a controlled shutdown of applications and the OS before the server enters standby mode.
- Press and hold the Power On/Standby button for more than 4 seconds to force the server to enter standby mode.
This method forces the server to enter standby mode without properly exiting applications and the OS. If an application stops responding, you can use this method to force a shutdown.
- Use a virtual power button selection through iLO.
This method initiates a controlled remote shutdown of applications and the OS before the server enters standby mode.

Before proceeding, verify that the server is in standby mode by observing that the system power LED is amber.

Remove the accelerator tray power cables from the chassis

1. Power down all servers ("Power down the server" on page 20).
2. Remove the accelerator tray power cables from the chassis.



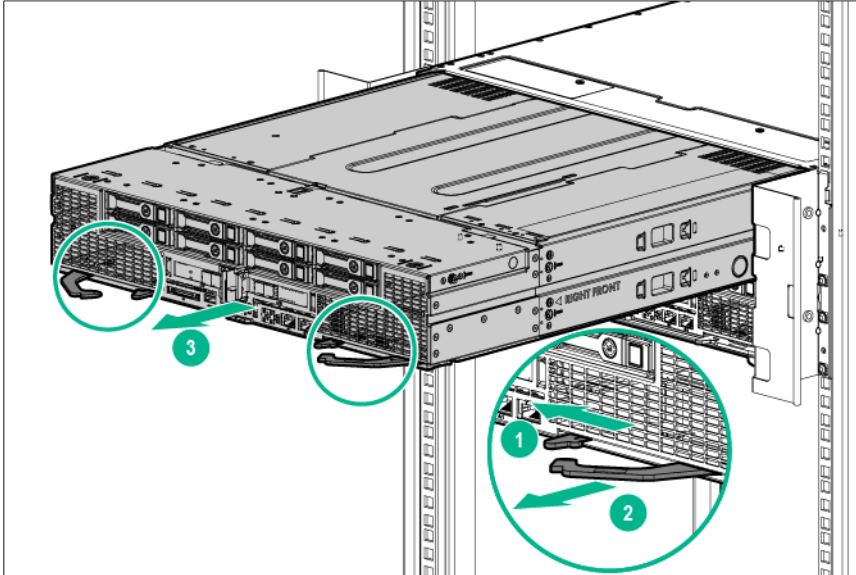
Removing the server from the chassis

CAUTION: Before powering down the server, perform a backup of critical server data and programs. Removing the server while the Do not remove LED is on may result in data loss or corruption. The server can be safely removed from the chassis only after the Do not remove LED is off.

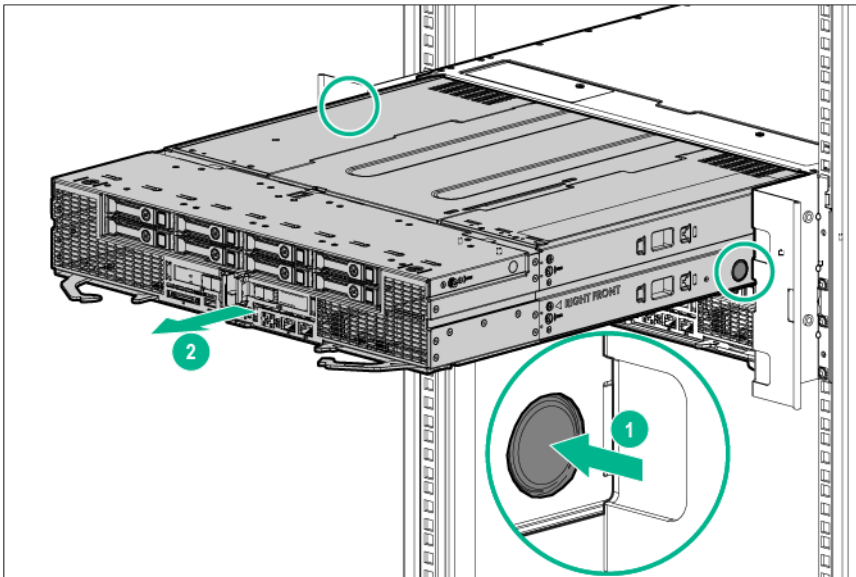
CAUTION: To avoid damage to the server, always support the bottom of the server when removing it from the chassis.

1. Back up all server data.
2. Power down the server (on page 20).
3. Disconnect all peripheral cables from the server front panel.
4. Extend the server from the chassis:
 - a. Release the safety latches.
 - b. Pull back the handles.

- c. Extend the server from the chassis until the server locks are engaged.



5. Remove the server from the chassis:
 - a. Press on the server release latches.
 - b. Slide the server out of the chassis.



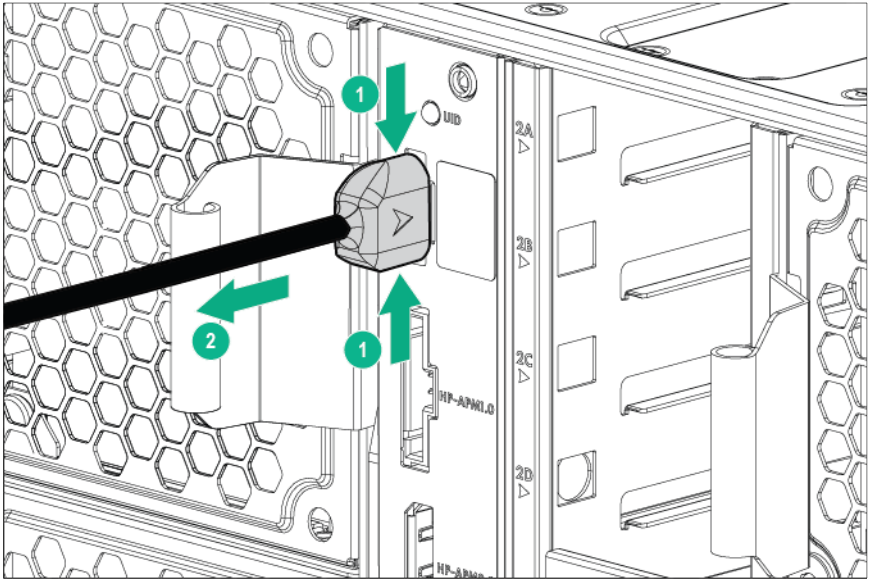
6. Place the server on a sturdy, level surface.

Remove the chassis management module

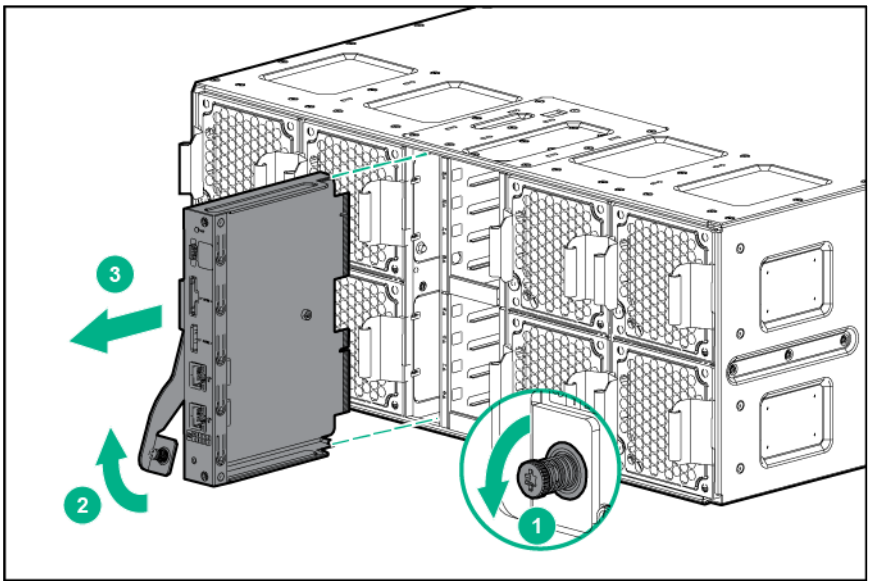
1. Power down all servers ("[Power down the server](#)" on page 20).
2. Remove all accelerator tray power cables ("[Remove the accelerator tray power cables from the chassis](#)" on page 21).
3. Disconnect the power management cable.



CAUTION: To prevent damage to the power management cable, release the cable by pressing the latches when disconnecting, instead of pulling directly.

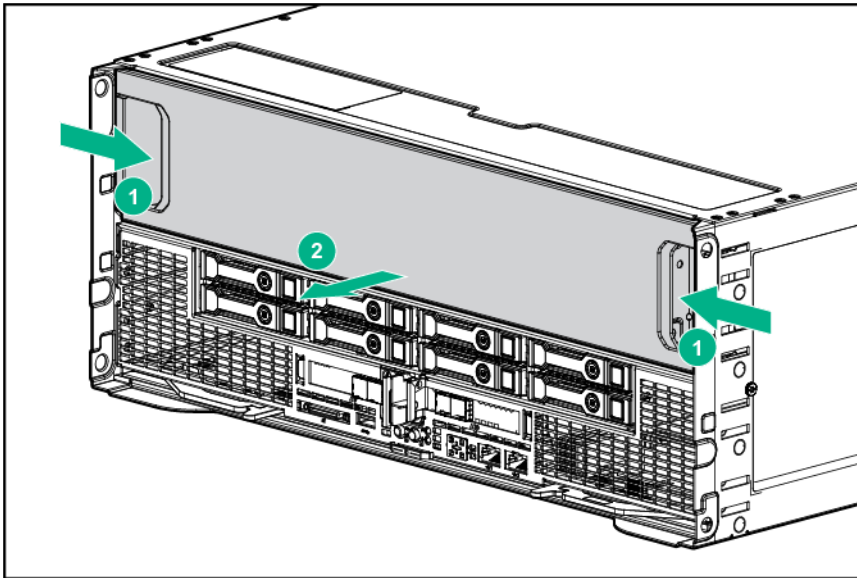


4. Disconnect all other cables from the chassis management module.
5. Remove the chassis management module.

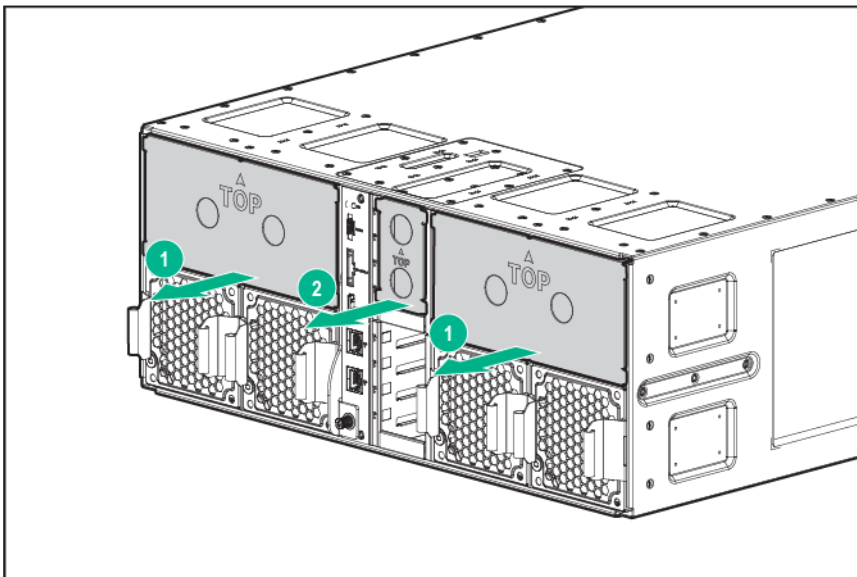


Remove the blanks

1. Remove the server bay blank.



2. Remove the fan blanks and power cage blanks.



Remove the chassis from the rack

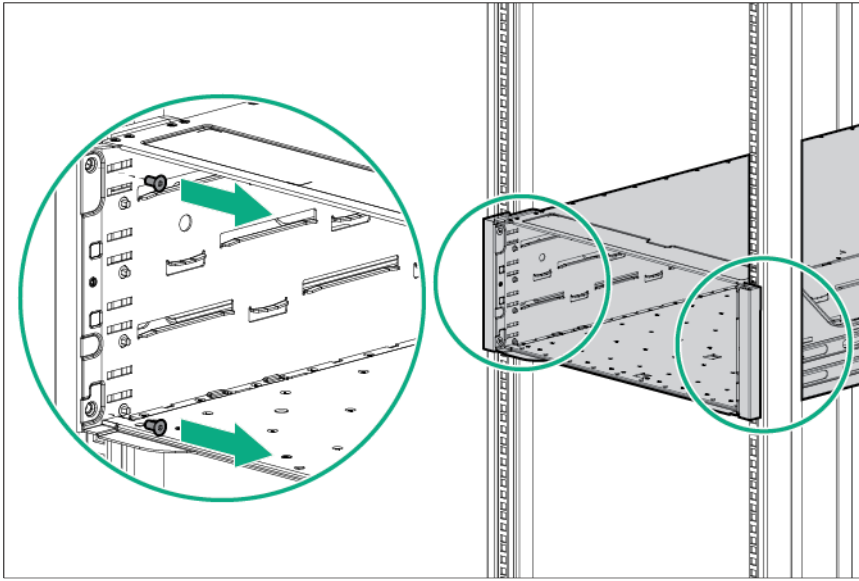


WARNING: The chassis is very heavy. To reduce the risk of personal injury or damage to the equipment:

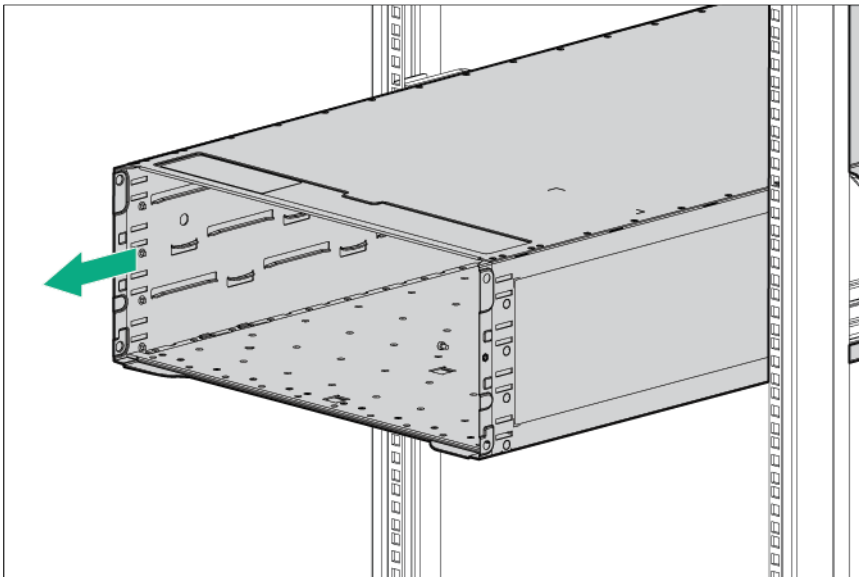
- Always use either a lift that can handle the load of the product or at least four people to lift and stabilize the product pieces during assembly, installation, or removal, especially when the chassis is not installed in the rack. An additional person may be required to help align the chassis if the chassis is installed higher than chest level.
- Observe local occupational health and safety requirements and guidelines for manual material handling.
- Hewlett Packard Enterprise recommends removing all installed components from the chassis before installing or moving the chassis.

To remove the chassis:

1. Power down all servers ("Power down the server" on page 20).
2. Remove all servers from the chassis ("Removing the server from the chassis" on page 21).
3. Remove the blanks (on page 24).
4. Remove all accelerator tray power cables ("Remove the accelerator tray power cables from the chassis" on page 21).
5. Remove the chassis management module (on page 22).
6. Remove the fans ("Remove the fan" on page 29).
7. Remove the T-15 Torx flathead screws that secure the chassis to the rack.



8. Remove the chassis from the rack.



9. Place the chassis on a flat surface.

Safety considerations

Before performing service procedures, review all the safety information.

Preventing electrostatic discharge

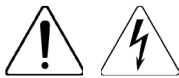
To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

To prevent electrostatic damage:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

Symbols on equipment

The following symbols may be placed on equipment to indicate the presence of potentially hazardous conditions.



This symbol indicates the presence of hazardous energy circuits or electric shock hazards. Refer all servicing to qualified personnel.

WARNING: To reduce the risk of injury from electric shock hazards, do not open this enclosure. Refer all maintenance, upgrades, and servicing to qualified personnel.



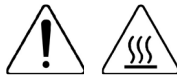
This symbol indicates the presence of electric shock hazards. The area contains no user or field serviceable parts. Do not open for any reason.

WARNING: To reduce the risk of injury from electric shock hazards, do not open this enclosure.



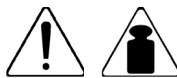
This symbol on an RJ-45 receptacle indicates a network interface connection.

WARNING: To reduce the risk of electric shock, fire, or damage to the equipment, do not plug telephone or telecommunications connectors into this receptacle.



This symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists.

WARNING: To reduce the risk of injury from a hot component, allow the surface to cool before touching.



This symbol indicates that the component exceeds the recommended weight for one individual to handle safely.

WARNING: To reduce the risk of personal injury or damage to the equipment, observe local occupational health and safety requirements and guidelines for manual material handling.



These symbols, on power supplies or systems, indicate that the equipment is supplied by multiple sources of power.

WARNING: To reduce the risk of injury from electric shock, remove all power cords to disconnect power from the system completely.

Warnings and cautions

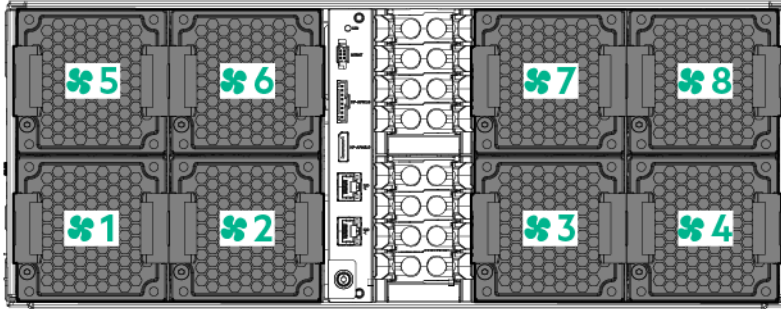
-
- WARNING:** To reduce the risk of personal injury or damage to equipment, heed all warnings and cautions throughout the installation instructions.
-
- WARNING:** To reduce the risk of personal injury or damage to the equipment, be sure that:
- The rack is bolted to the floor using the concrete anchor kit.
 - The leveling feet extend to the floor.
 - The full weight of the rack rests on the leveling feet.
 - The racks are coupled together in multiple rack installations.
 - Only one component is extended at a time. If more than one component is extended, a rack might become unstable.
-
- WARNING:** The chassis is very heavy. To reduce the risk of personal injury or damage to the equipment, do the following:
- Observe local occupational health and safety requirements and guidelines for manual material handling.
 - Get help to lift and stabilize the product during installation or removal, especially when the product is not fastened to the rails. A fully-loaded chassis weighs up to 97.98 kg (216.00 lb), so at least four people must lift the chassis into the rack together. An additional person may be required to help align the chassis if the chassis is installed higher than chest level.
-
- WARNING:** To reduce the risk of personal injury or damage to the equipment, you must adequately support the chassis during installation and removal.
-
- WARNING:** Be sure to install the chassis starting from the bottom of the rack, and then work your way up the rack.
-
- WARNING:** To reduce the risk of personal injury from hot surfaces, allow the drives and the internal system components to cool before touching them.
-
- WARNING:** To reduce the risk of electric shock or damage to the equipment:
- Never reach inside the chassis while the system is powered up.
 - Perform service on system components only as instructed in the user documentation.
-
- CAUTION:** Always be sure that equipment is properly grounded and that you follow proper grounding procedures before beginning any installation procedure. Improper grounding can result in ESD damage to electronic components. For more information, refer to "Electrostatic discharge (on page 66)."
-
- CAUTION:** When performing non-hot-plug operations, you must power down the server and/or the system. However, it may be necessary to leave the server powered up when performing other operations, such as hot-plug installations or troubleshooting.
-

Chassis procedures

This section provides removal and replacement procedures for chassis components.

System fans

Population guidelines for system fans

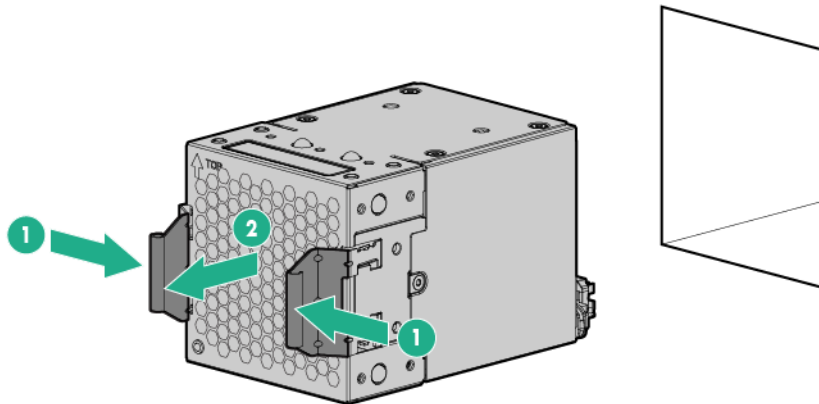


CAUTION: To avoid server shutdown, a fan must be replaced within 60 seconds of being removed.

- If a server is installed in the chassis bottom server bay, fans must be installed in fan bays 1, 2, 3, and 4.
- If a server is installed in the chassis top server bay, fans must be installed in fan bays 5, 6, 7, and 8.
- Each fan contains two rotors. If one rotor fails, the fan is degraded and continues to operate. The health LED on the degraded fan changes to red and a management event is logged. The chassis can operate normally with one degraded fan (one failed rotor) until that fan is replaced.

Remove the fan

Remove the component as indicated.

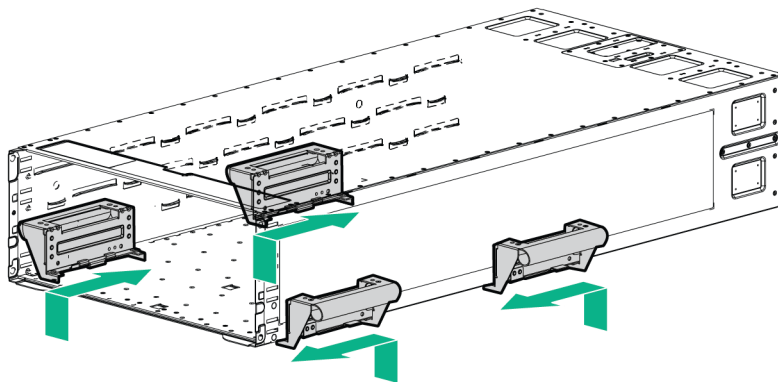


To replace the component, reverse the removal procedure.

Installing the chassis handles

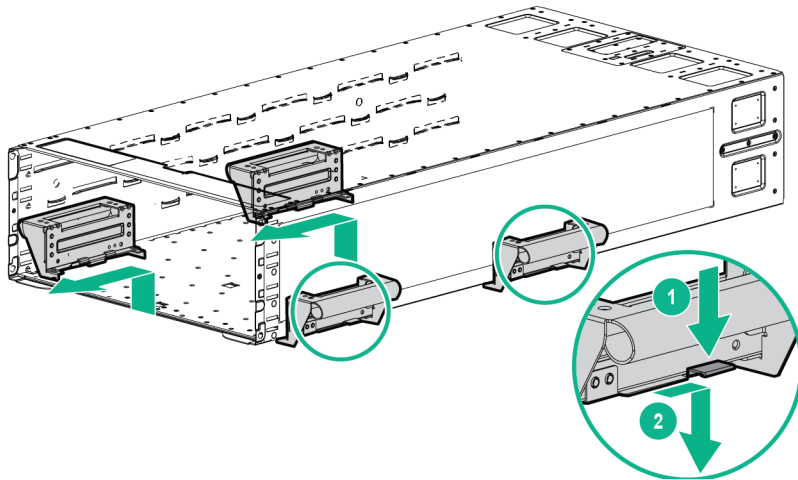
The HPE Apollo d6500 Chassis facilitate lifting the chassis up to the rails. Remove the handles when sliding the chassis into the rack.

1. Insert the handles into the slot openings on the bottom of the chassis, and then slide them until they are in locked position.



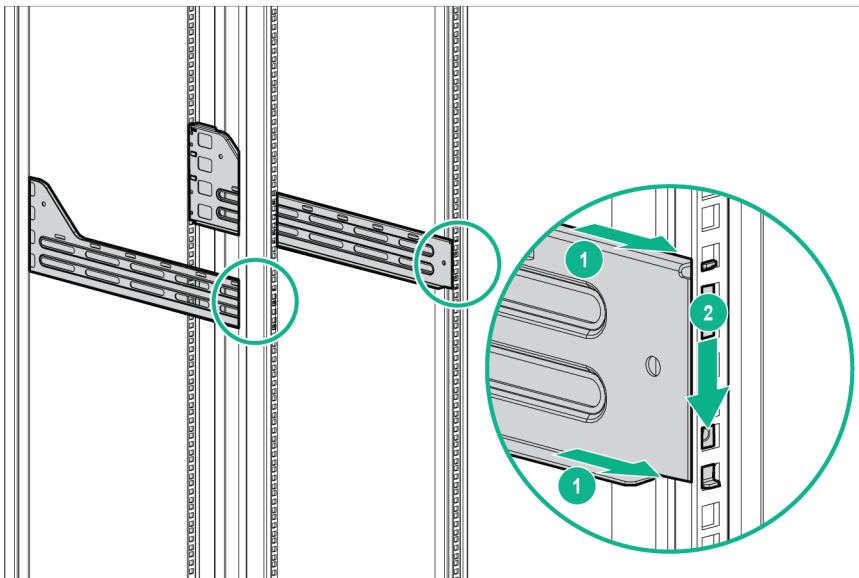
NOTE: The chassis handles facilitate lifting the chassis up to the rails. Remove the handles when sliding the chassis into the rack.

2. To remove the chassis handles, press the latches and then slide the handles off the chassis.

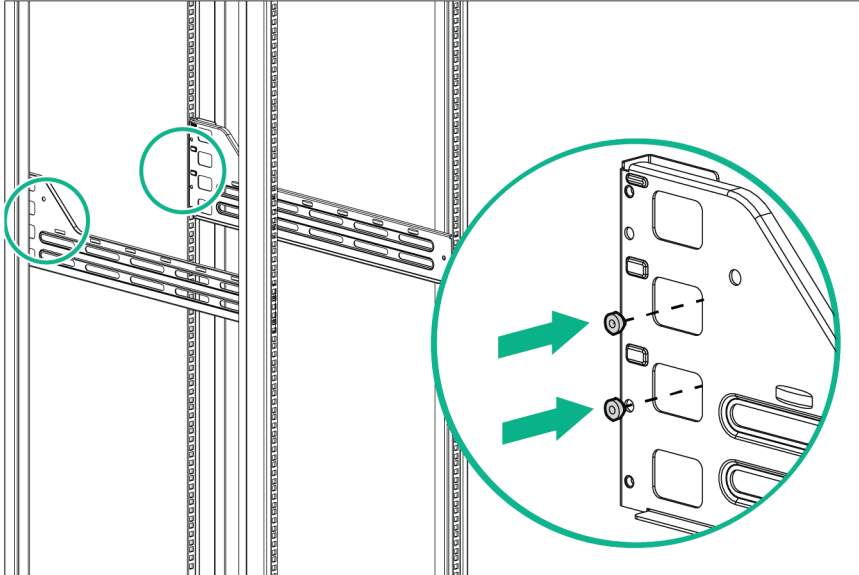


Installing the 4U chassis rack rail kit

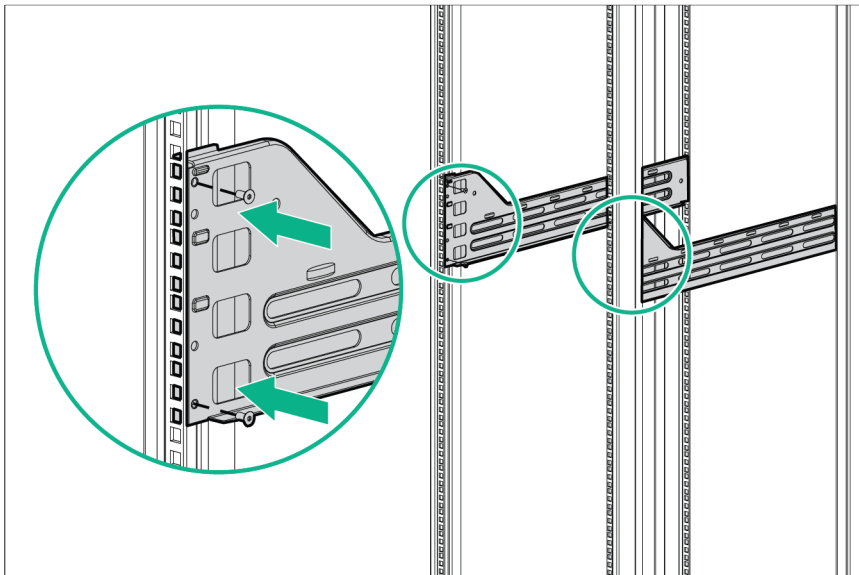
1. Insert the rack rail in the column.



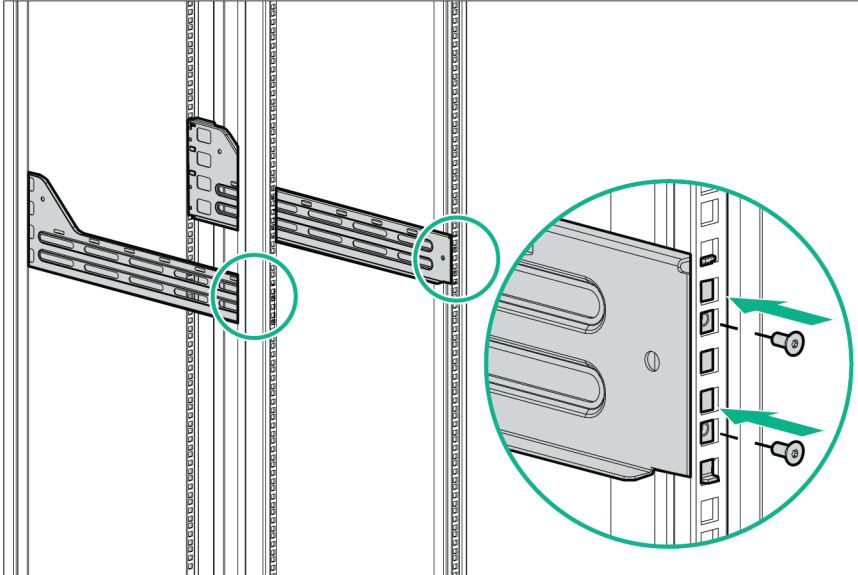
2. Install the T-15 Torx alignment pins into the holes on the front rack column.



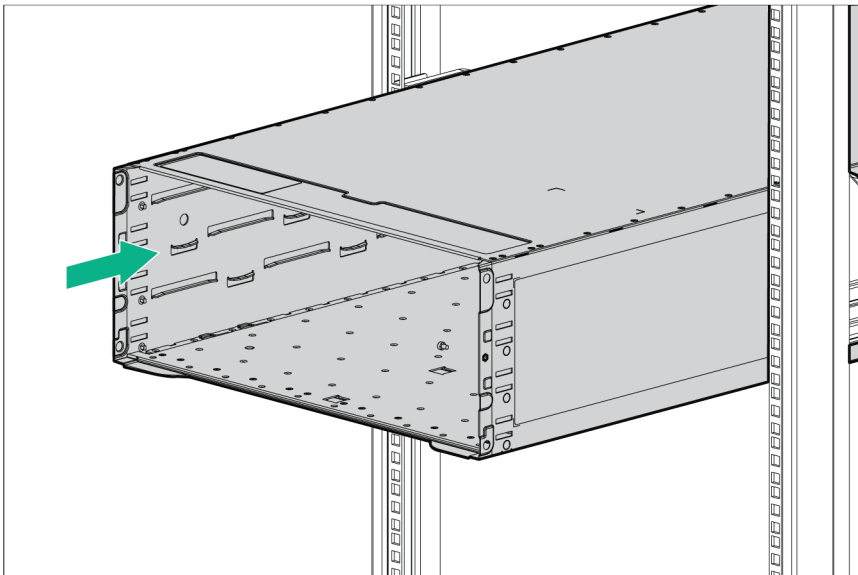
3. Secure the front of the rail to the rack column with the T-25 Torx panhead screws.



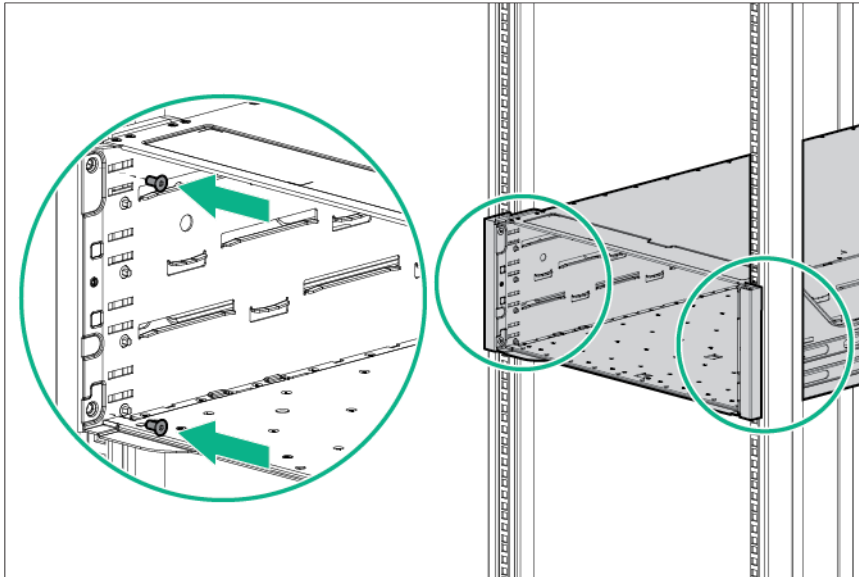
4. Secure the rail to the rear rack column with the T-25 Torx panhead screws.



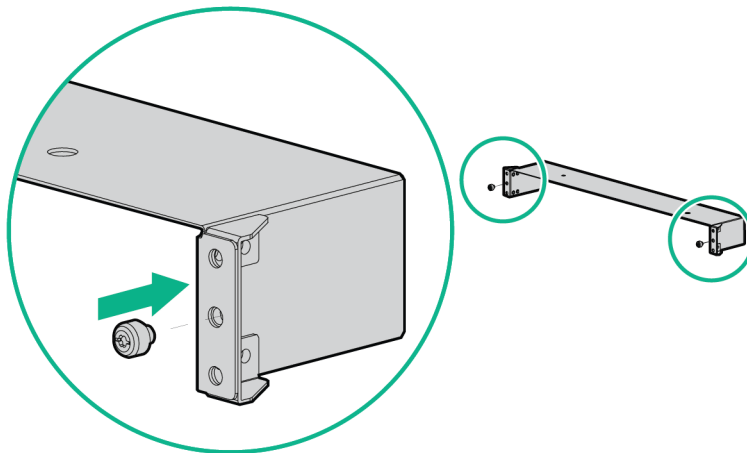
5. Install the chassis into the rack.



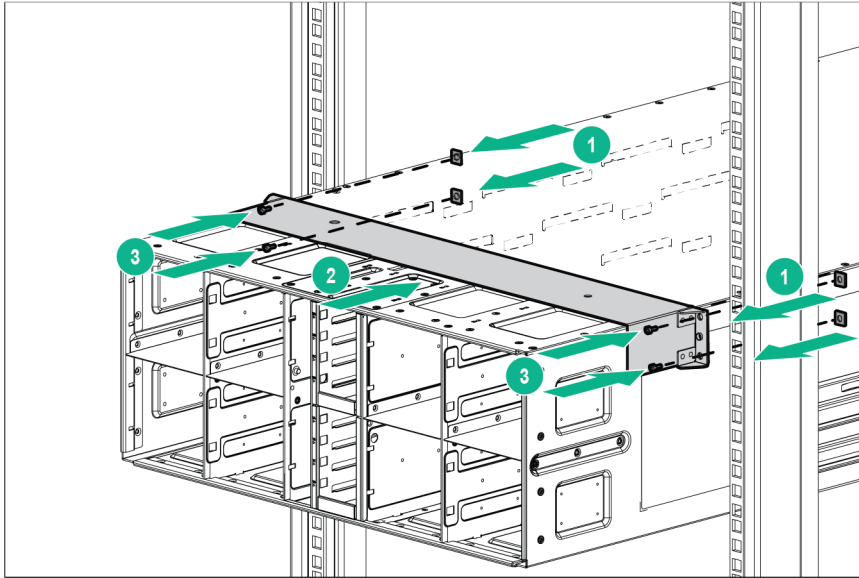
6. Secure the chassis to the rack with the T-15 Torx flathead screws.



7. To install the shipping bracket:
 - a. Secure the T-15 Torx alignment pins to the shipping bracket.

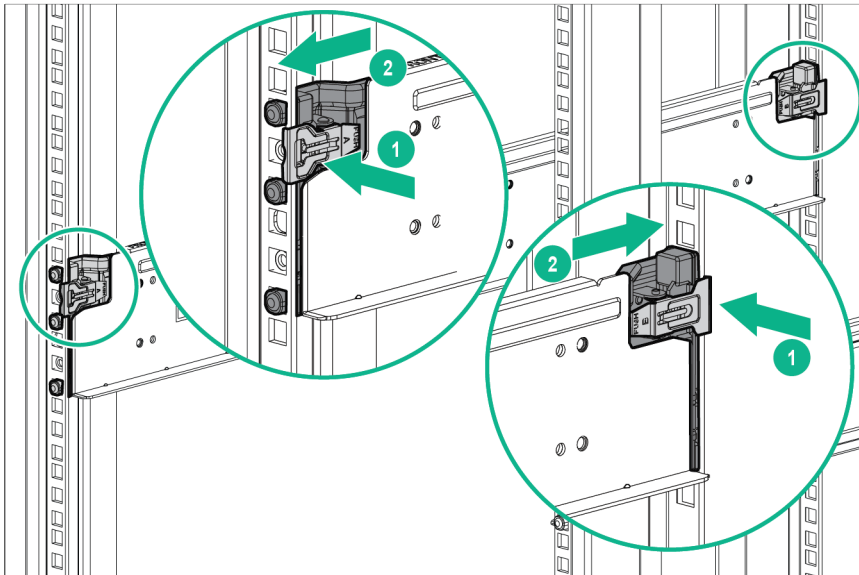


- b. Install the square-hole cage nuts, and then align the shipping bracket with the rack column. To secure the shipping bracket to the rack column, fasten the T-25 Torx screws.

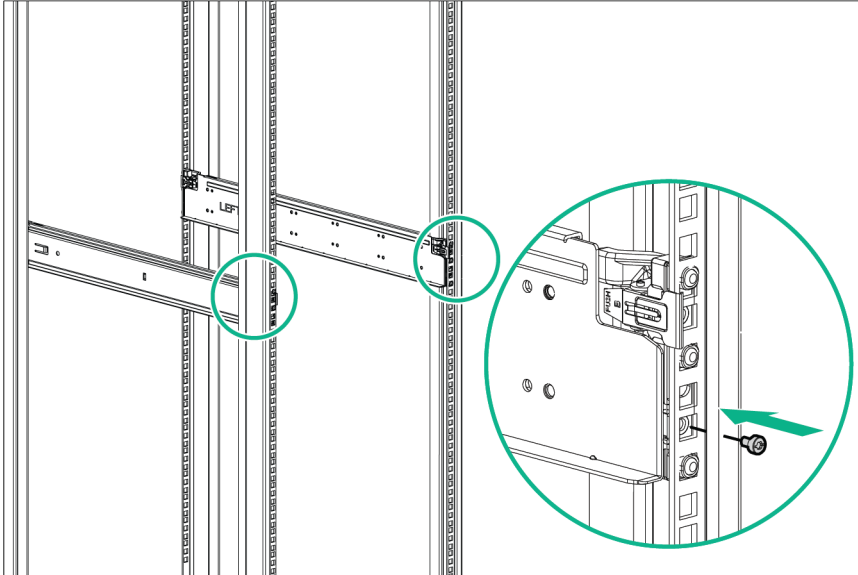


Installing the 4U third-party rack rail kit

1. To insert the rack rail into the rack column, press the latches and slide the rail into place.
2. To secure the rail to the rack column, release the latches.

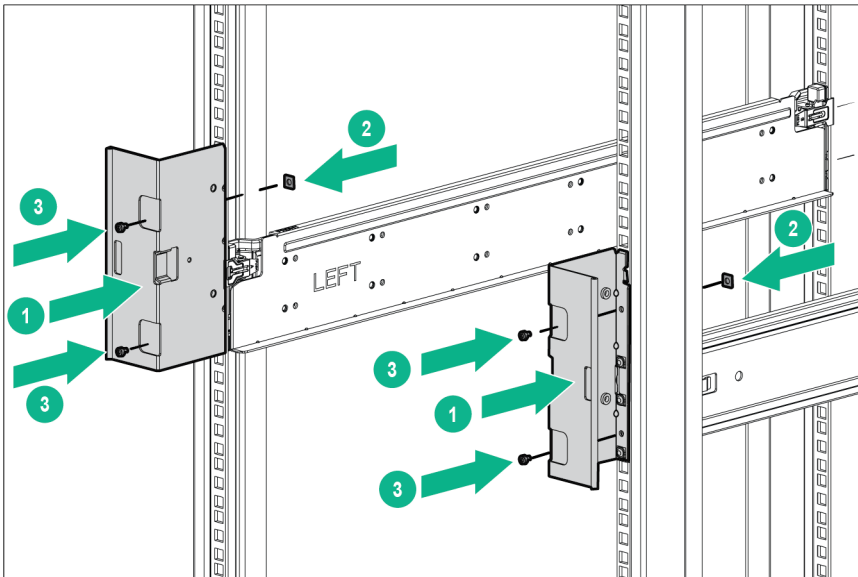


3. Secure the rail to the rear rack column with one T-25 Torx panhead screw.

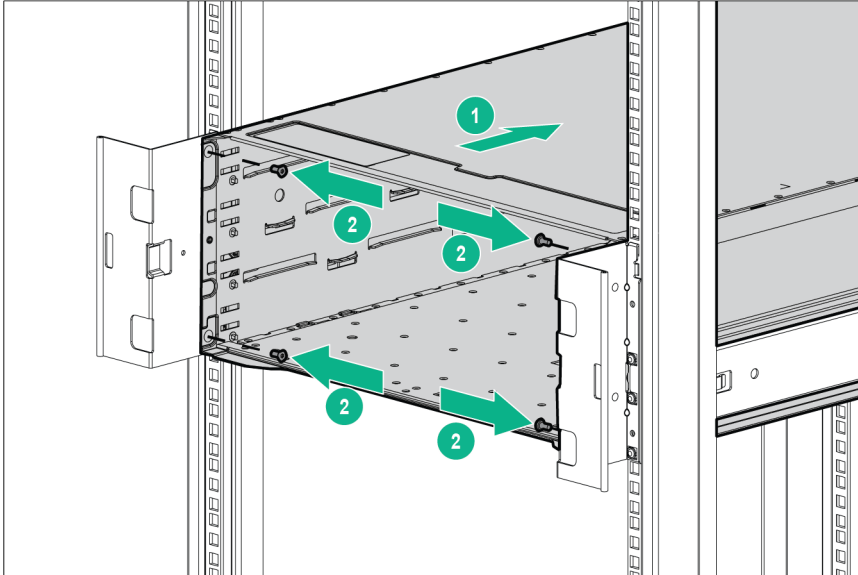


4. Install the bracket:

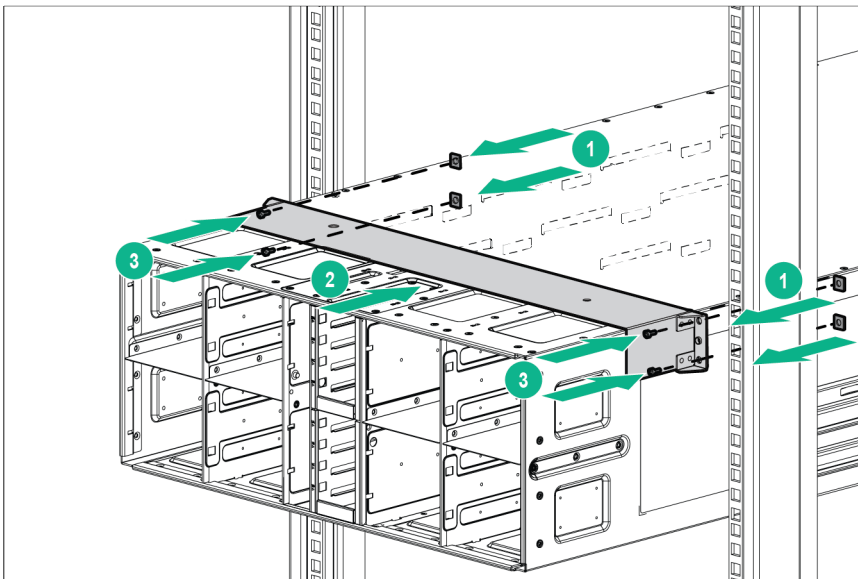
- a. Align the bracket with the rack column and rail, and then install one cage nut.
- b. To secure the bracket to the rack column, fasten the T-25 Torx slotted screws.



5. Install the chassis into the rack and secure it with four T-15 Torx flathead screws.



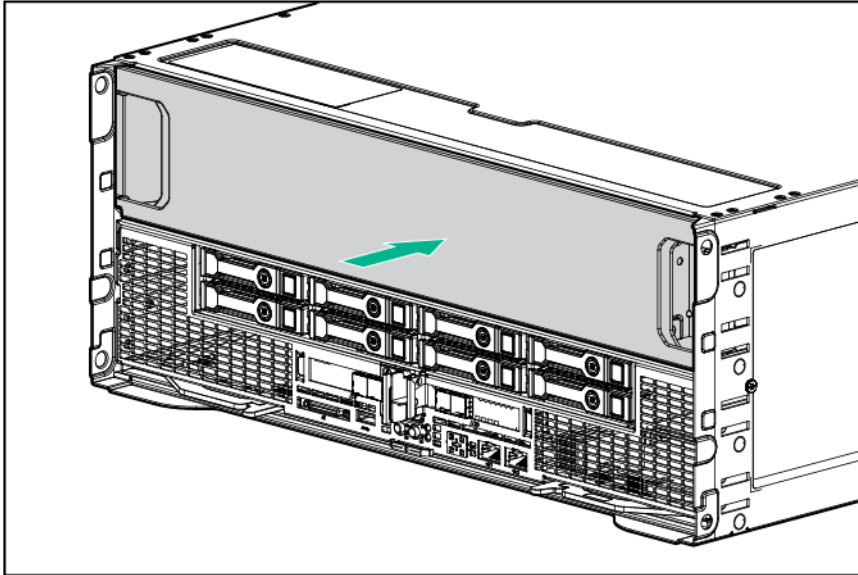
6. To install the shipping bracket:
 - a. Install the square-hole cage nuts.
 - b. Align the shipping bracket with the rack column.
 - c. To secure the shipping bracket to the rack column, fasten the T-25 Torx slotted screws.



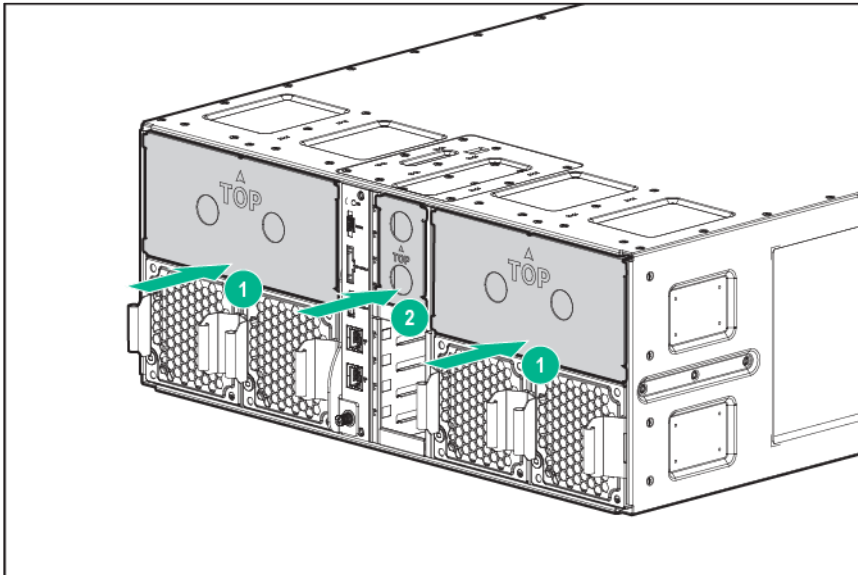
Installing the accelerator tray blank kit

- CAUTION:** To prevent improper cooling and thermal damage, do not operate the chassis unless all bays are populated with a component or a blank.

1. Install the server bay blank.



2. Install the fan blanks and the power cable bay blank.

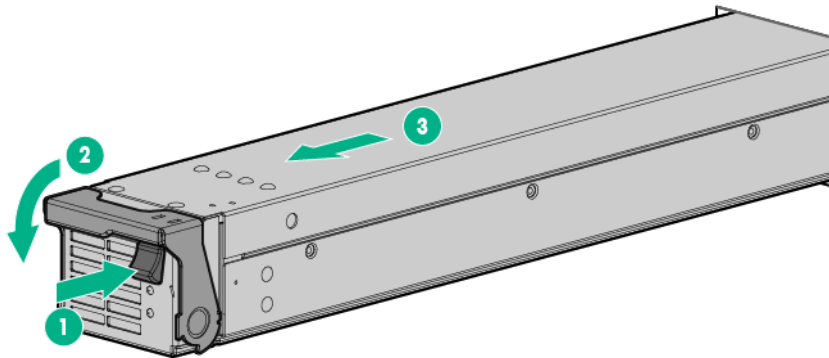


Power shelf procedures

This section provides removal and replacement procedures for power shelf components.

Power supplies

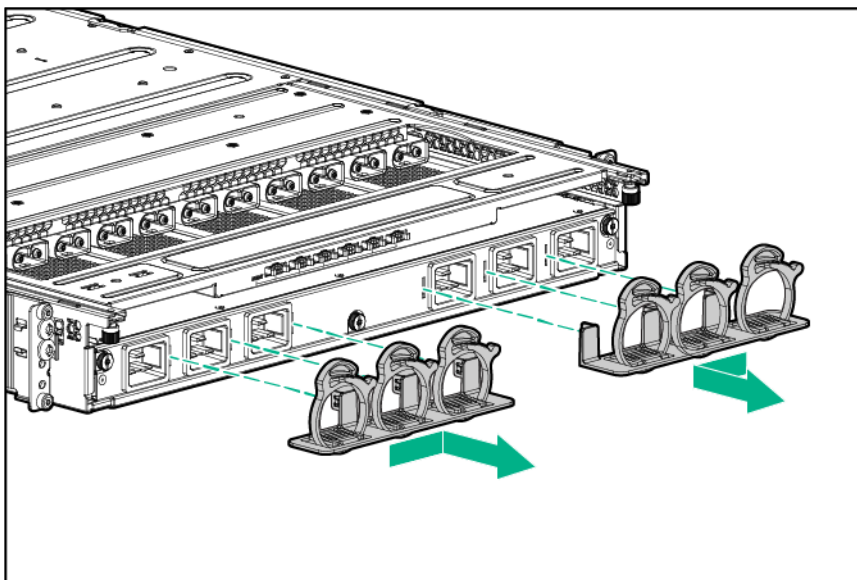
Remove the component as indicated.



To replace the component, reverse the removal procedure.

Power cable retention brackets (left and right)

Remove the component as indicated.



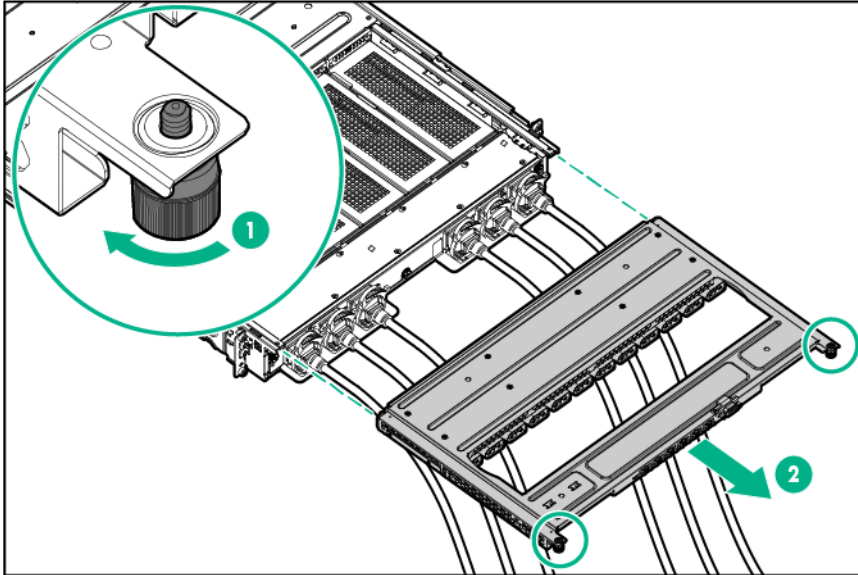
To replace the component, reverse the removal procedure.

Power management module

To remove the component:

1. Power down servers installed in the chassis connected to the power shelf ("Power down the server" on page 20).
2. Remove the safety guard.
3. Remove the DC power cables.

4. Remove the power management module.



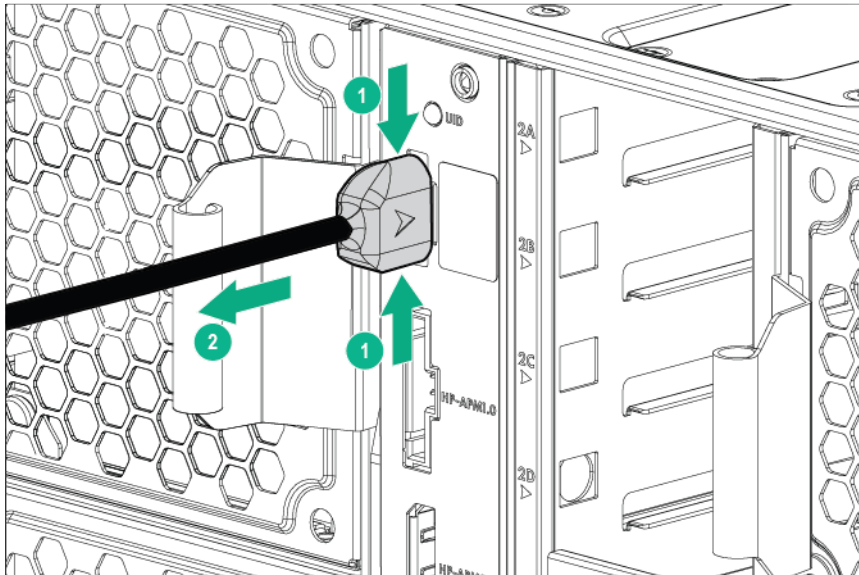
To replace the component, reverse the removal procedure.

Power management cable

To remove the component:

1. Power down all servers ("Power down the server" on page 20).
2. Disconnect the power management cable from chassis management module.

CAUTION: To prevent damage to the power management cable, release the cable by pressing the latches when disconnecting, instead of pulling directly.



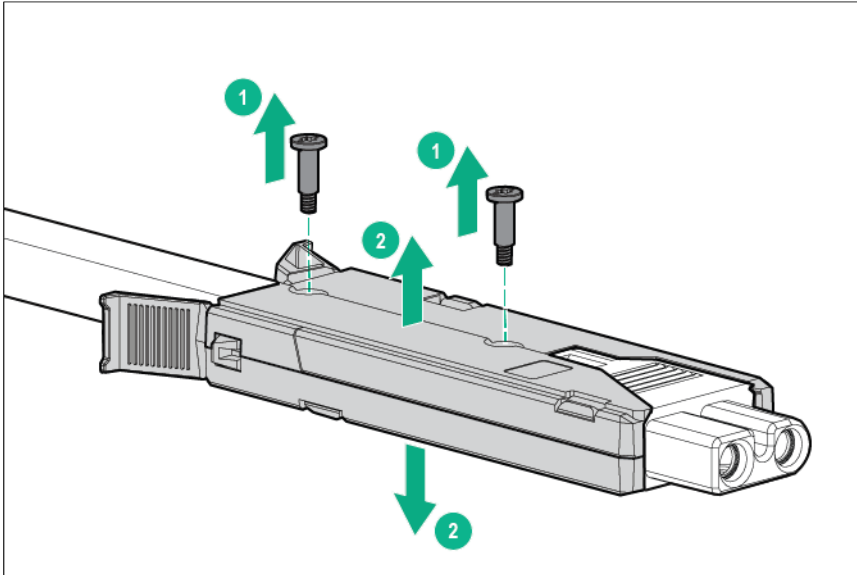
3. Disconnect the power management cable from power shelf.

To replace the component, reverse the removal procedure.

Power cable holder

To remove the component:

1. Power down the server (on page 20).
2. Remove the power cable from the chassis ("[Remove the accelerator tray power cables from the chassis](#)" on page 21).
3. Remove the screws.
4. Remove the holder.



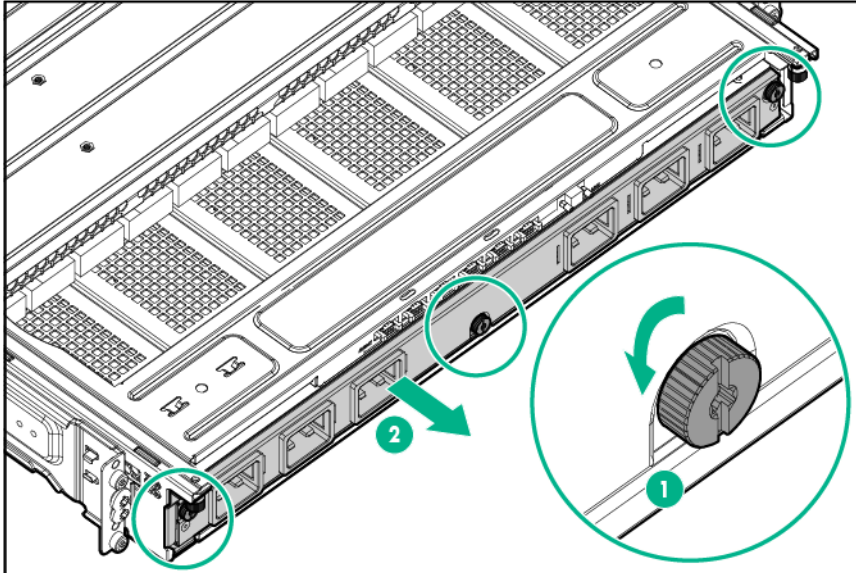
To replace the component, reverse the removal procedure.

AC input module

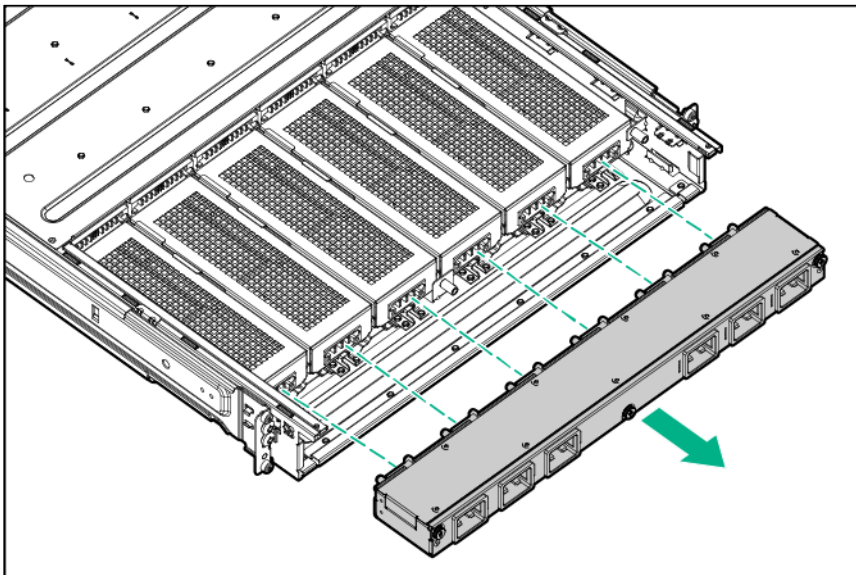
To remove the component:

1. Power down servers installed in the chassis connected to the power shelf ("[Power down the server](#)" on page 20).
2. Remove the AC power cables.
3. Remove the safety guard.
4. Remove the DC power cables.
5. Remove all power supplies ("[Power supplies](#)" on page 38).
6. Remove the power management module ("[Power management module](#)" on page 38).

7. Loosen the three screws on the AC input module.



8. Remove the AC input module.



To replace the component, reverse the removal procedure.

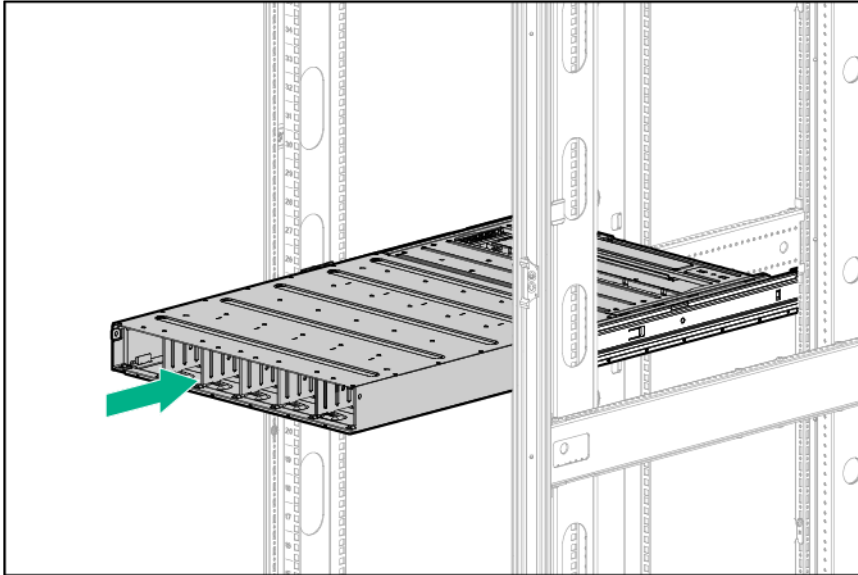
Installing the power shelf

CAUTION: To prevent damage to the component, power down the chassis and disconnect all power cords before removing or installing the component.

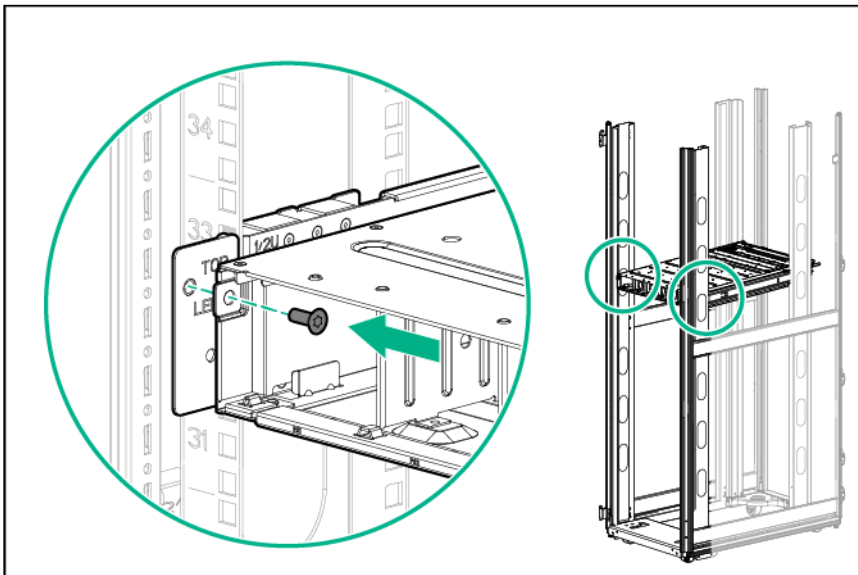
To install the component:

1. Install the power shelf rack rails into the rack. For more information, see the *HPE Power Shelf Rail Kit for Hewlett Packard Enterprise and Third Party Rack Installation Instructions*. This document ships with the rail kit and is also available on the Hewlett Packard Enterprise website (<http://www.hpe.com/support/Apollo-PowerShelf-rail-ii-en>).

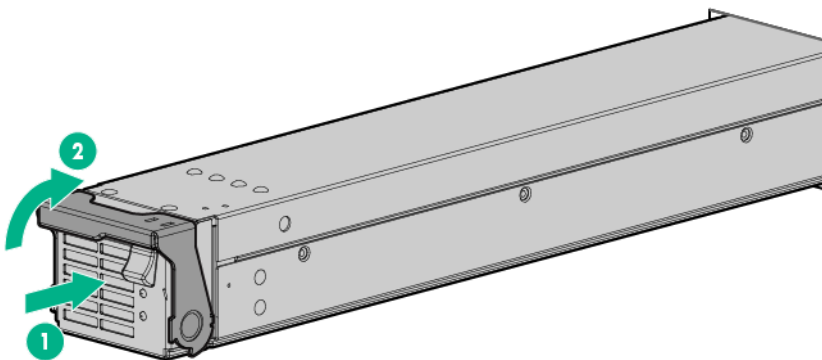
2. Install the power shelf.



3. Secure the power shelf to the rack.

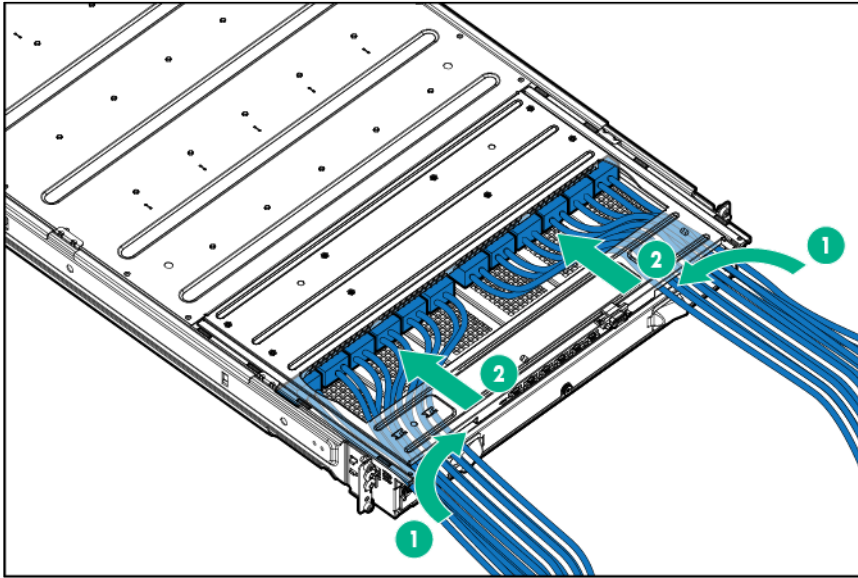


4. Install the power supplies into the power shelf, if needed.

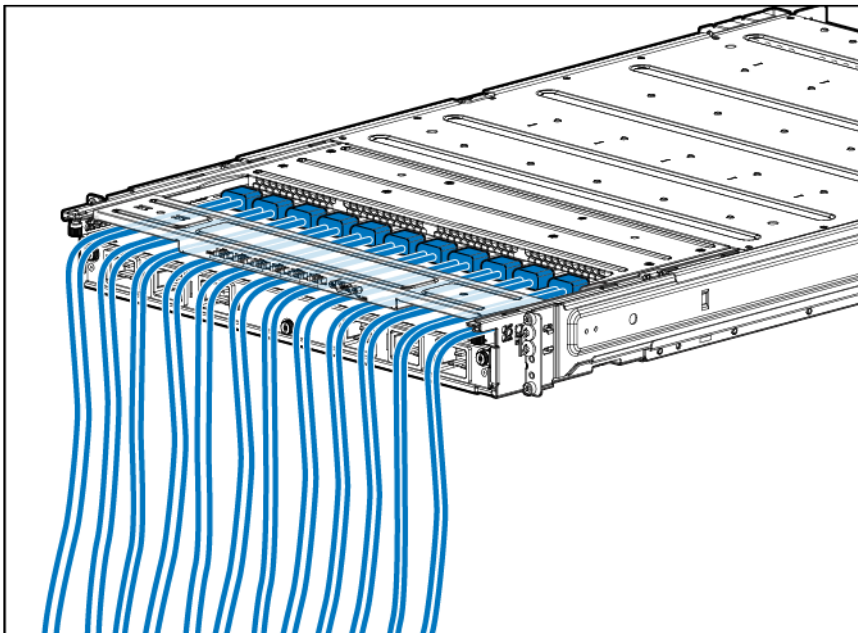


NOTE: If additional clearance is required to install power cables, loosen the thumb screw on either side of the shelf and slide the shelf out while installing the cables. Use caution to avoid bending the shelf.

5. Remove the power supply vent cover.
Cable quantity and length are determined by the configuration of components. For more information, see the Hewlett Packard Enterprise Power Advisor website (<http://www.hpe.com/info/hpepoweradvisor>).
6. Install the 12V DC power cables.
 - a. Insert the cable through the wide opening on either end of the power shelf, and then connect it to the appropriate connector.

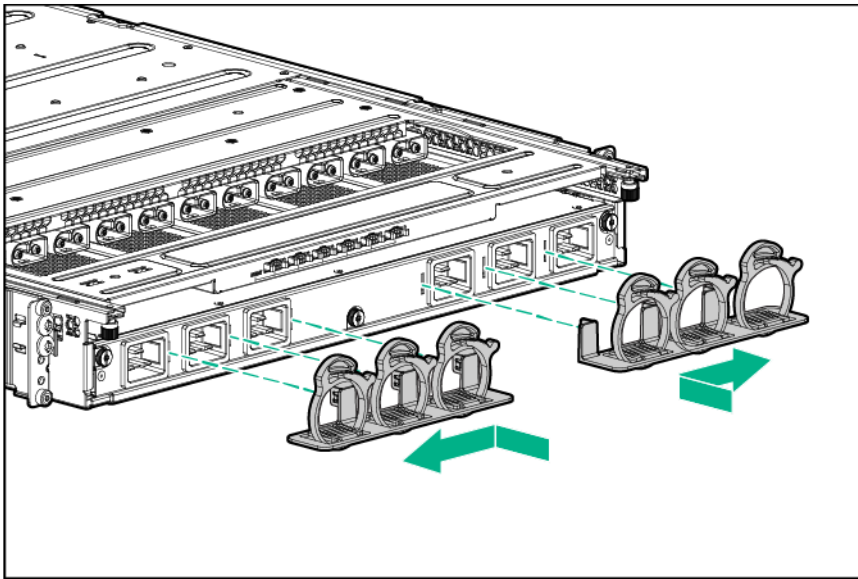


- b. Slide the cables toward the center, allowing them to straighten and hang from the rear of the power shelf.

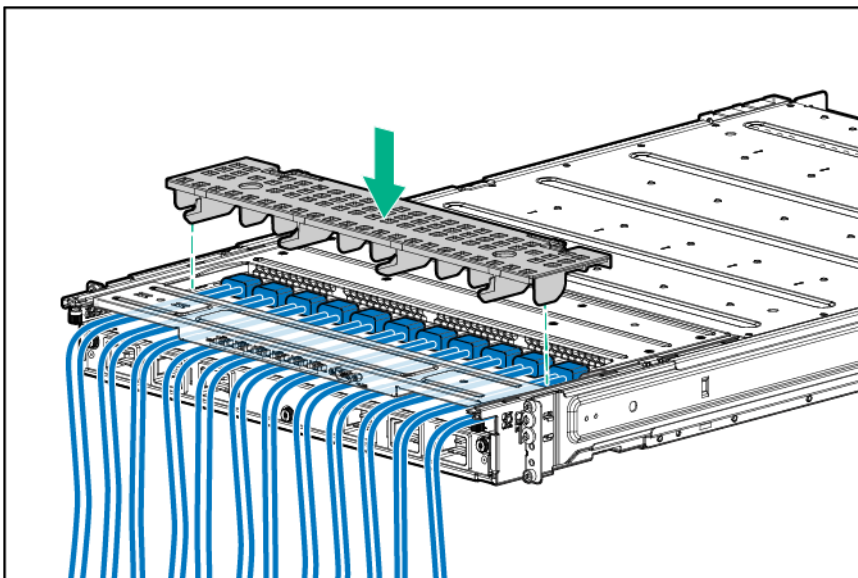


7. Install the cable guard.

NOTE: Cables are removed for clarity.



8. Install the power supply vent cover to protect the power supply vents.



Diagnostic tools

Troubleshooting resources

The *HPE ProLiant Gen9 Troubleshooting Guide, Volume I: Troubleshooting* provides procedures for resolving common problems and comprehensive courses of action for fault isolation and identification, issue resolution, and software maintenance on ProLiant servers and server blades. To view the guide, select a language:

- English (http://www.hpe.com/support/Gen9_TSG_en)
- French (http://www.hpe.com/support/Gen9_TSG_fr)
- Spanish (http://www.hpe.com/support/Gen9_TSG_es)
- German (http://www.hpe.com/support/Gen9_TSG_de)
- Japanese (http://www.hpe.com/support/Gen9_TSG_ja)
- Simplified Chinese (http://www.hpe.com/support/Gen9_TSG_zh_cn)

The *HPE ProLiant Gen9 Troubleshooting Guide, Volume II: Error Messages* provides a list of error messages and information to assist with interpreting and resolving error messages on ProLiant servers and server blades. To view the guide, select a language:

- English (http://www.hpe.com/support/Gen9_EMG_en)
- French (http://www.hpe.com/support/Gen9_EMG_fr)
- Spanish (http://www.hpe.com/support/Gen9_EMG_es)
- German (http://www.hpe.com/support/Gen9_EMG_de)
- Japanese (http://www.hpe.com/support/Gen9_EMG_ja)
- Simplified Chinese (http://www.hpe.com/support/Gen9_EMG_zh_cn)

Product QuickSpecs

For more information about product features, specifications, options, configurations, and compatibility, see the product QuickSpecs on the Hewlett Packard Enterprise website (<http://www.hpe.com/info/qs>).

Integrated Management Log

The IML records hundreds of events and stores them in an easy-to-view form. The IML timestamps each event with 1-minute granularity.

You can view recorded events in the IML in several ways, including the following:

- From within HPE SIM
- From within the UEFI System Utilities
- From within the Embedded UEFI shell
- From within operating system-specific IML viewers:
 - For Windows: IML Viewer
 - For Linux: IML Viewer Application

- From within the iLO web interface
- From within Insight Diagnostics (on page 46)

Insight Diagnostics

The Insight Diagnostics is a proactive server management tool, available in both offline and online versions. The tool provides diagnostics and troubleshooting capabilities to assist IT administrators who verify server installations, troubleshoot problems, and perform repair validation.

The Insight Diagnostics Offline Edition performs various in-depth system and component testing while the OS is not running. To run this utility, boot the server using Intelligent Provisioning.

The Insight Diagnostics Online Edition is a web-based application that captures system configuration and other related data needed for effective server management. Available in Microsoft Windows and Linux versions, the utility helps to ensure proper system operation.

For more information or to download the utility, see the Hewlett Packard Enterprise website (<http://www.hpe.com/info/InsightDiagnostics>). The Insight Diagnostics Online Edition is also available in the SPP.

Insight Diagnostics survey functionality

Insight Diagnostics (on page 46) provides survey functionality that gathers critical hardware and software information on ProLiant servers.

This functionality supports operating systems that the server supports. For operating systems supported by the server, see the Hewlett Packard Enterprise website (<http://www.hpe.com/info/supportos>).

If a significant change occurs between data-gathering intervals, the survey function marks the previous information and overwrites the survey data files to reflect the latest changes.

Survey functionality is installed with every Intelligent Provisioning-assisted Insight Diagnostics installation, or it can be installed through the SPP.

Erase Utility



CAUTION: Perform a backup before running the Erase Utility. The utility completes the following:

- Sets the system to its original factory state
- Deletes the current hardware configuration information, including array setup and disk partitioning
- Erases all connected hard drives completely.

Before using this utility, see the instructions in the *Intelligent Provisioning User Guide*.

Use the Erase Utility to erase drives and Active Health System logs, and to reset UEFI System Utilities settings. Run the Erase Utility if you must erase the system for the following reasons:

- You want to install a new operating system on a server with an existing operating system.
- You encounter an error when completing the steps of a factory-installed operating system installation.

To access the Erase Utility, click the Perform Maintenance icon from the Intelligent Provisioning home screen, and then select **Erase**.

For more information about the Erase Utility, see the *Intelligent Provisioning User Guide* on the Hewlett Packard Enterprise website (<http://www.hpe.com/info/intelligentprovisioning/docs>).

HPE Smart Storage Administrator

The HPE SSA is a configuration and management tool for HPE Smart Array controllers. Starting with HPE ProLiant Gen8 servers, HPE SSA replaces ACU with an enhanced GUI and additional configuration features.

The HPE SSA exists in three interface formats: the HPE SSA GUI, the HPE SSA CLI, and HPE SSA Scripting. Although all formats provide support for configuration tasks, some of the advanced tasks are available in only one format.

Some HPE SSA features include the following:

- Supports online array capacity expansion, logical drive extension, assignment of online spares, and RAID or stripe size migration
- Provides diagnostic and SmartSSD Wear Gauge functionality on the Diagnostics tab
- For supported controllers, provides access to additional features.

For more information about HPE SSA, see the Hewlett Packard Enterprise website (<http://www.hpe.com/servers/ssa>).

ProLiant Power Interface Control Utility

HPE ProLiant Power Interface Control Utility is a command-line utility performing power display and control power functions for the chassis. You can use the utility and the embedded Power Management Controller to set different power levels or chassis power capping.

The utility provides the following:

- Chassis fan controls
- Chassis power control
- Server fans and power through BMC, iLO, and BIOS
- Capability to power up servers based on power capacity
- Power emergency break support
- Capability to set the chassis power level through PPIC utilities with BMC and iLO

For more information or to download the ProLiant Power Interface Control Utility, see the Hewlett Packard Enterprise website (http://www.hpe.com/support/ppicu_dr).

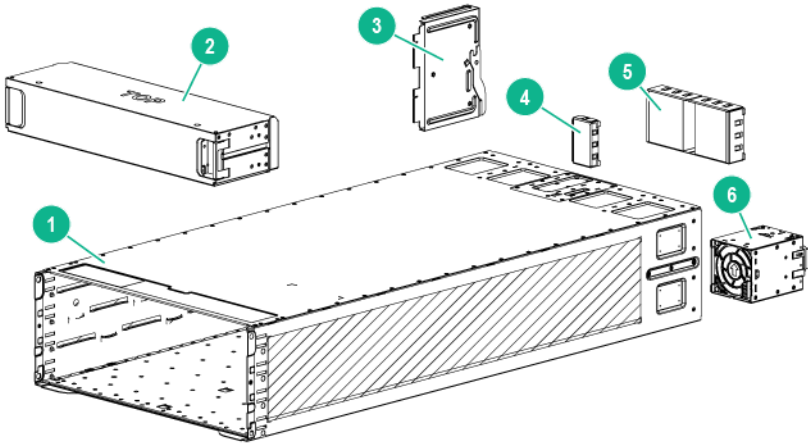
HPE Apollo Platform Manager

HPE Apollo Platform Manager (formerly named HPE Advanced Power Manager) is a point of contact for system administration.

To install, configure, and access HPE APM, see the *HPE Apollo Platform Manager User Guide* on the Hewlett Packard Enterprise website (http://www.hpe.com/support/APM_UG_en).

Identifying components and LEDs

System components

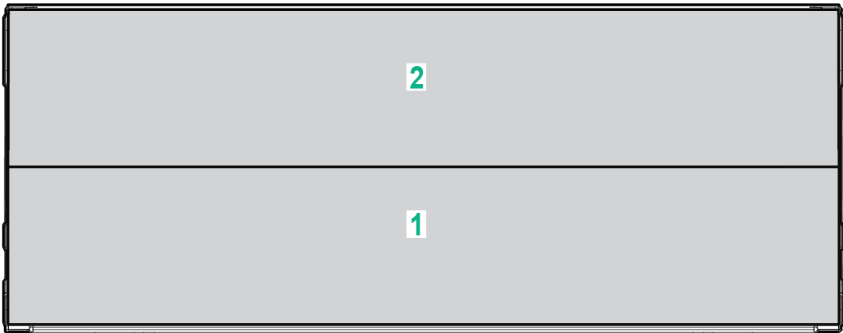


Item	Description
1	HPE Apollo d6500 Chassis
2	Server bay blank
3	Chassis management module
4	Power cable bay blank*
5	Fan bay blank*
6	Fan assembly*
7	Server tray**

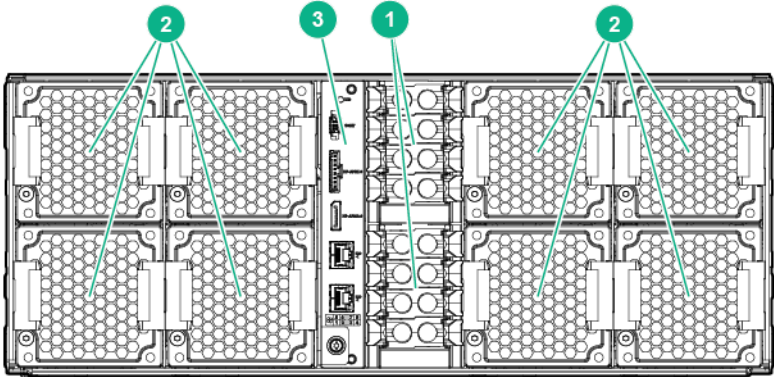
* The quantity depends on the configuration ordered.

** Not shown.

Server tray bay numbering



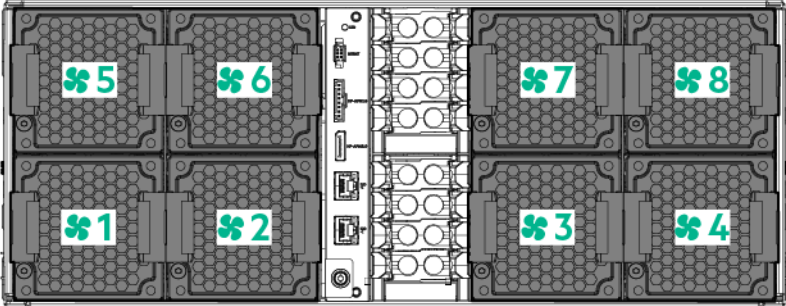
Rear panel components



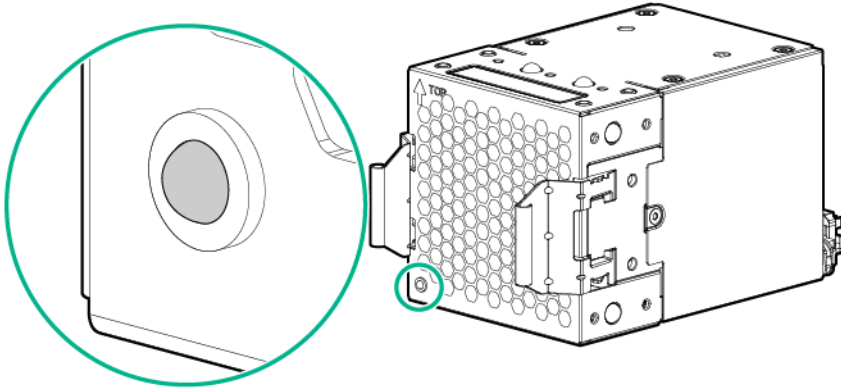
Item	Description
1	Server power cable bays
2	Fan assemblies
3	Chassis management module

Fan assembly bay numbering

The chassis supports eight fan assemblies. The following figure identifies the fan assemblies by device number.

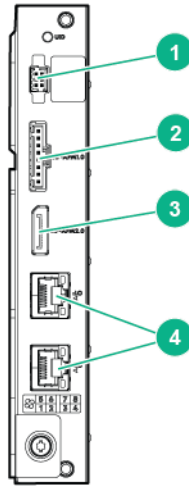


Fan LED



Status	Description
Off	The fan is working or the power is off.
Solid amber	The fan has failed.

Chassis management module components



Item	Description
1	Management cable connector
2	HPE APM 1.0 connector
3	HPE APM 2.0 connector
4	iLO connectors



IMPORTANT: Do not connect both iLO ports to the network at the same time. Only one iLO port can be connected to the network, while the other iLO port can be used only as a connection to a second enclosure. Having both ports connected at the same time results in a loopback condition.

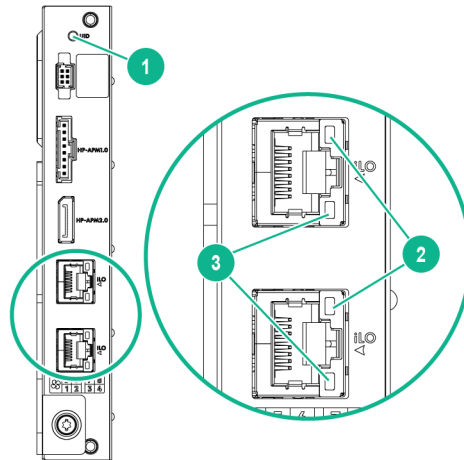


IMPORTANT: If using the chassis management module iLO ports to connect multiple chassis to a network, the network must operate at a speed of 1 Gb/s. The servers installed in the chassis cannot connect to the network if the network is operating at a speed of 10/100 Mb/s or 10 Gb/s.



IMPORTANT: If a dedicated iLO management port module is installed in the server, the server can only connect to a network through the dedicated iLO management port module. For more information, see the server user guide.

Management module LEDs



Item	Description	Status
1	UID LED ¹	Solid blue = Activated or server installed with no power <ul style="list-style-type: none"> • 1 flash per second = Remote management or firmware upgrade in progress • 4 flashes per second = iLO manual soft reboot sequence initiated • 8 flashes per second = iLO manual hard reboot sequence in progress Off = Deactivated
2	iLO activity LED	Green or flashing green = Network activity Off = No network activity
3	iLO link LED	Green = Linked to network Off = No network connection

¹ When the LEDs described in this table flash simultaneously, a power fault has occurred. For more information, see "Power fault LEDs (on page 53)."



IMPORTANT: Do not connect both iLO ports to the network at the same time. Only one iLO port can be connected to the network, while the other iLO port can be used only as a connection to a second enclosure. Having both ports connected at the same time results in a loopback condition.



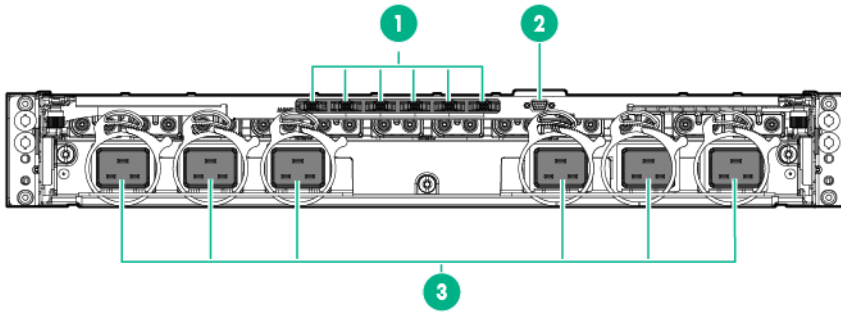
IMPORTANT: If using the chassis management module iLO ports to connect multiple chassis to a network, the network must operate at a speed of 1 Gb/s. The servers installed in the chassis cannot connect to the network if the network is operating at a speed of 10/100 Mb/s or 10 Gb/s.



IMPORTANT: If a dedicated iLO management port module is installed in the server, the server can only connect to a network through the dedicated iLO management port module. For more information, see the server user guide.

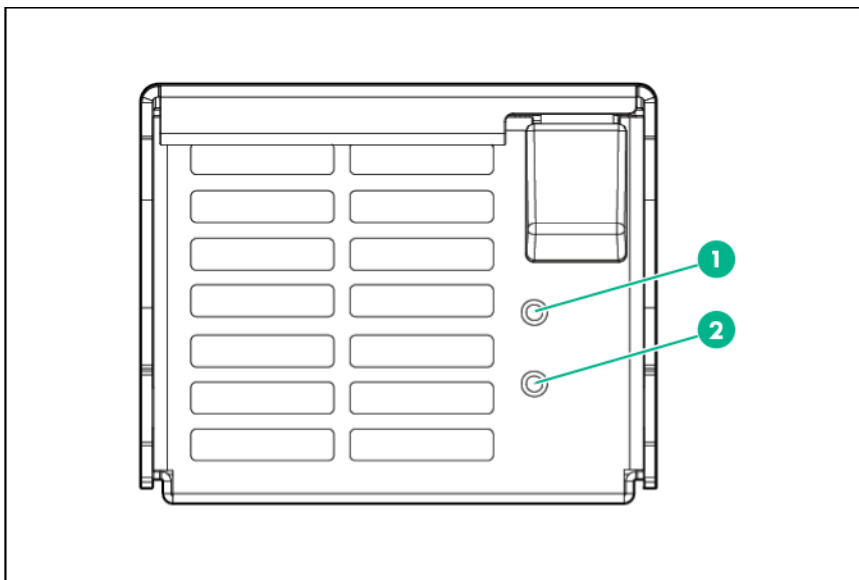
Power shelf rear panel components

NOTE: The single-phase power shelf is shown below. A three-phase power shelf is also available.



Item	Description
1	Power management connectors (6)
2	APM module connector (PDM)
3	AC input module power connectors (6)

Power supply LEDs



Power LED 1 (green)	Fault LED 2 (amber)	Condition
Off	Off	No AC power to the power supply
On	Off	Normal
Off	On	Power supply failure


Power fault LEDs


The following table provides a list of power fault LEDs, and the subsystems that are affected. Not all power faults are used by all servers.


Subsystem	LED behavior
System board	1 flash
Processor	2 flashes
Memory	3 flashes
Riser board PCIe slots	4 flashes
FlexibleLOM	5 flashes
Removable HPE Flexible Smart Array controller/Smart SAS HBA controller	6 flashes
System board PCIe slots	7 flashes
Power backplane or storage backplane	8 flashes
Power supply	9 flashes

Cabling

Cabling overview

-
-  **WARNING:** Be sure that all circuit breakers are locked in the off position before connecting any power components.

 -  **CAUTION:** To avoid damaging the fiber cables, do not drape cables from one side of the rack to the other and do not run cables over a hard corner or edge.

 -  **CAUTION:** To avoid damaging the cable, squeeze the thermal boot on the cable before disconnecting from the connector.
-


Cabling procedures


After the hardware is installed, complete the following cabling procedures:

1. Connecting the chassis to a power shelf (on page [55](#)).
2. Connecting the chassis to the network:
 - o Connecting the optional HPE APM module (on page [58](#))
 - o Connecting multiple chassis to the network with the chassis management module iLO ports (on page [60](#))
3. Connecting power cables and applying power to the chassis (on page [60](#))

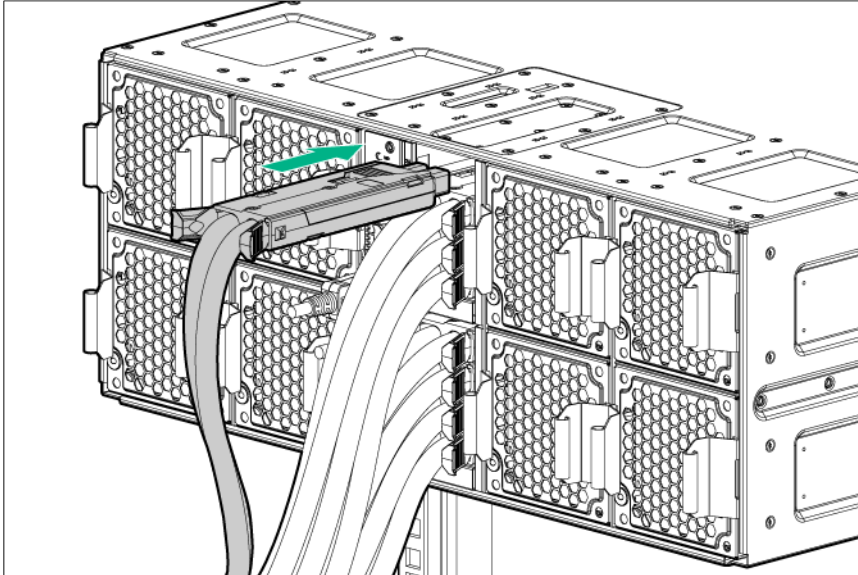
Connecting the chassis to a power shelf

1. Employ best practices to route and manage the power cords and other cables in the server rear panel.

-
-  **CAUTION:** To prevent improper cooling and damage to the equipment, do not block the ventilation openings.

 -  **CAUTION:** Do not connect cables from the chassis to two different power shelves. The chassis can only be connected to one power shelf.
-

2. Install the power cables into the chassis.



3. To complete this procedure, locate the power management cable (part number 867755-001).



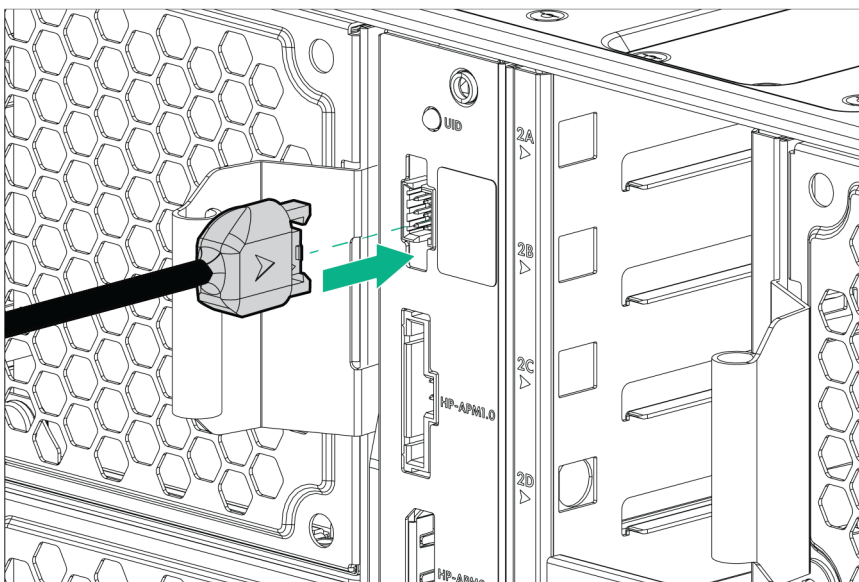
CAUTION: To prevent damage to the power management cable, release the cable by pressing the latches when disconnecting, instead of pulling directly.



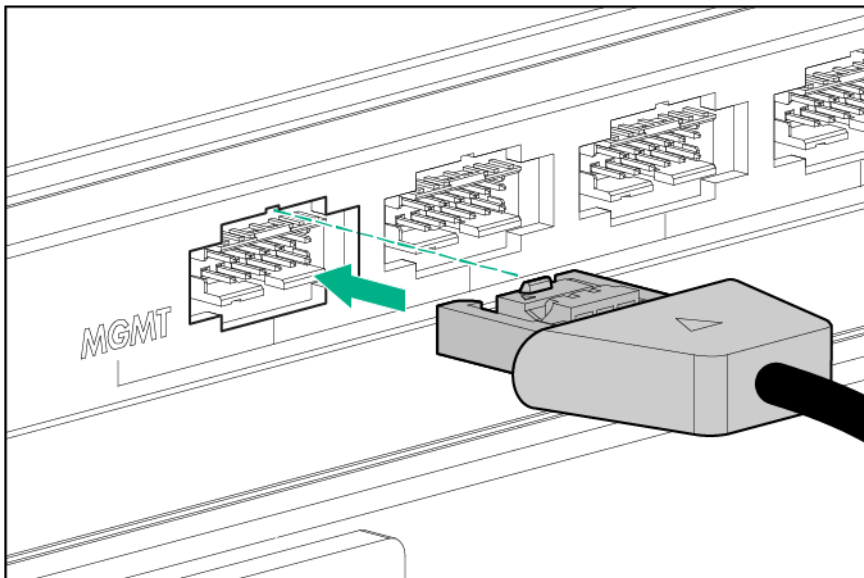
IMPORTANT: When connecting the power management cable to the chassis management module and the power shelf, be sure to install the cable with the plastic tab on the top of the connector. Failure to install the cable properly can result in performance and reporting issues.

4. Connect the power management cable to the chassis management module with the cable's plastic tab facing right.

NOTE: Cables are removed for clarity.

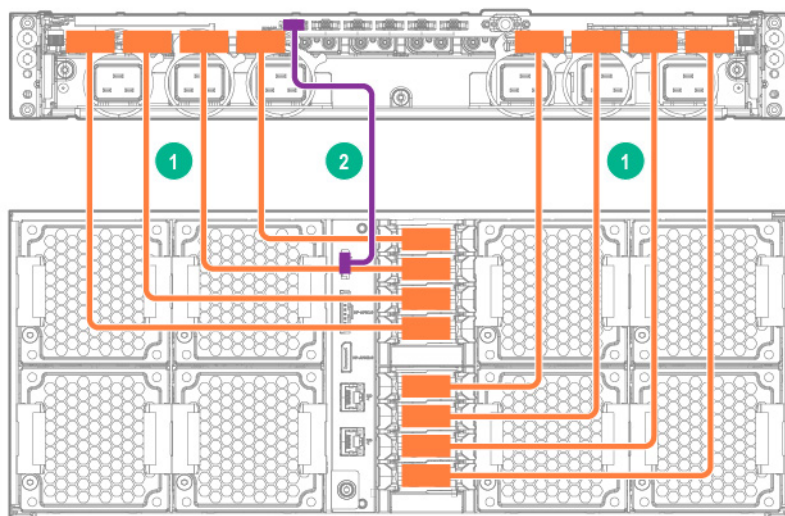


5. Connect the power management cable to the power shelf with the cable's plastic tab facing up.

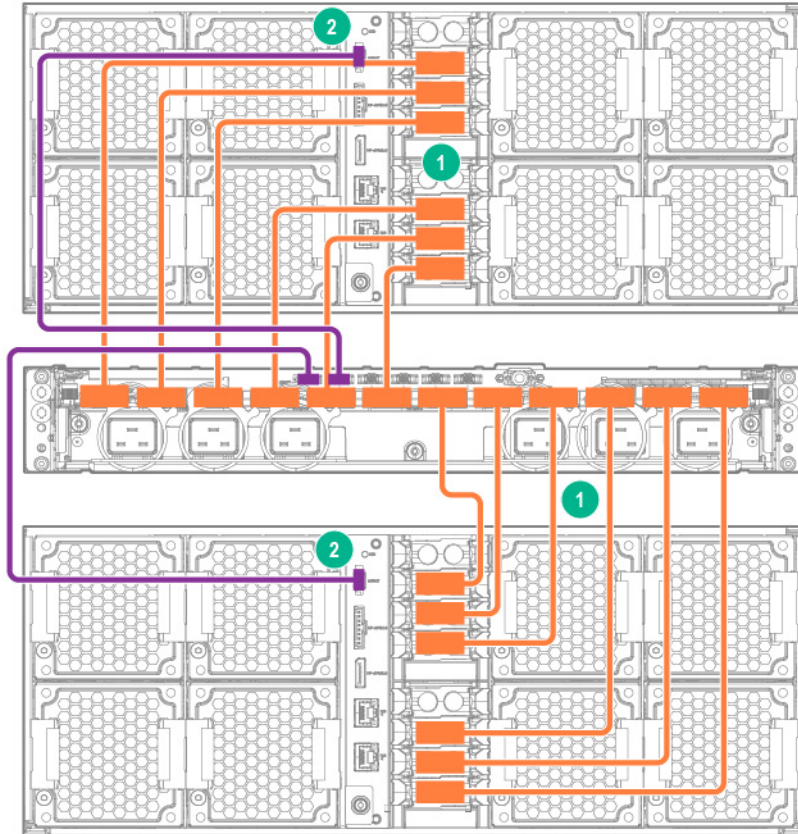


The examples below represent possible configurations for cabling the system.

- o Connecting one chassis to one power shelf



- o Connecting two chassis to one power shelf



Item	Description
1	12V DC power cables
2	Power management cables

Cable quantity and length are determined by the configuration of components. For more information, see the Hewlett Packard Enterprise Power Advisor website (<http://www.hpe.com/info/hpepoweradvisor>).

Example configurations

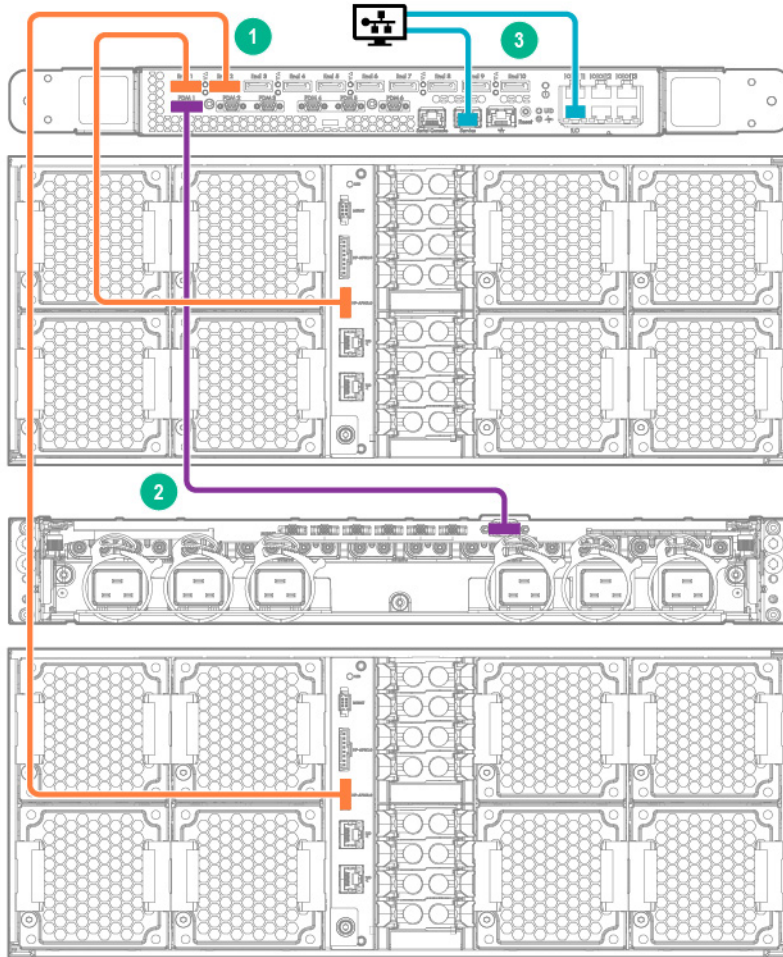
Configuration examples can be calculated using the HPE Power Advisor Tool (<http://www.hpe.com/info/poweradvisor/online>). This tool is designed for facilities planning purposes only. Values obtained from the tool are based on worst case loads. Whenever possible, Hewlett Packard Enterprise recommends using actual measurements in configuration planning. Measurements must be made with the intended configuration, application loading, and ambient environment.

Actual power usage will vary, depending on application loading, ambient temperature, and other factors.

Connecting the optional HPE APM module

1. Connect the HPE APM to the chassis.
2. Connect the HPE APM to the power shelf.

3. Connect the HPE APM to the network.



Item	Description
1	Cables connecting the HPE APM to the chassis
2	Cable connecting the HPE APM to the power shelf
3	Cables connecting the HPE APM to the network



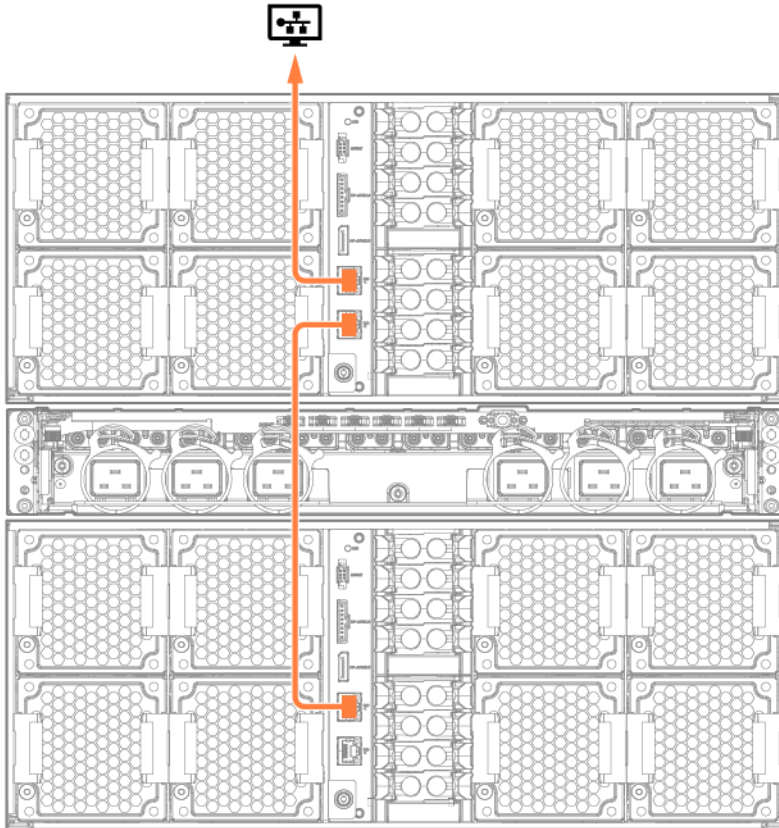
IMPORTANT: If you have an HPE APM connected to an Apollo d6500 Chassis, do not connect the iLO port of the HPE APM and the iLO port of the enclosure to the network at the same time. Having both ports connected at the same time results in a loopback condition.



IMPORTANT: If a dedicated iLO management port module is installed in the server, the server can only connect to a network through the dedicated iLO management port module. For more information, see the server user guide.

Connecting multiple chassis to the network with the chassis management module iLO ports

1. Connect all cables to the chassis management modules and the network. Multiple chassis can be connected to the same network.



IMPORTANT: If using the chassis management module iLO ports to connect multiple chassis to a network, the network must operate at a speed of 1 Gb/s. The servers installed in the chassis cannot connect to the network if the network is operating at a speed of 10/100 Mb/s or 10 Gb/s.



IMPORTANT: If a dedicated iLO management port module is installed in the server, the server can only connect to a network through the dedicated iLO management port module. For more information, see the server user guide.

NOTE: Arrow indicates connection to the network.

Connecting power cables and applying power to the chassis

Connect the AC power cables to the power source (UPS or wall outlet) or to an installed PDU.

Configuring the system

Power capping

The HPE ProLiant XL family of products provides a power capping feature that operates at the server enclosure level. The capping feature can be activated with PPIC.EXE, a stand-alone utility that runs in the environment of one of the resident servers in the chassis to be power capped. After a power cap is set for the enclosure, all the resident servers in the enclosure will have the same uniform power cap applied to them until the cap is either modified or canceled.

With APM, the enclosure-level power capping feature can be expanded without the need to use the PPIC.EXE utility. A global power cap can be applied to all enclosures with one APM command, or different caps can be applied to user-defined groups by using flexible zones within the same rack.

Power capping modes

The following Power Management modes are standard and are configurable in the power management controller:

- **Mode 0: No Redundancy**
All power-capping is disabled. This mode can be used to minimize any possible performance impact of power-capping logic.
- **Mode 1: Max Performance with Redundancy**
This is the default power capping mode. This mode allows the maximum number of nodes to run by engaging power-capping if the power draw from the chassis attempts to exceed the load supported by the active power supplies. In this mode, the system is expected to survive (with degraded performance) an unexpected power loss to one or more of the power supplies.
- **Mode 2: Full AC/DC Redundancy Mode**
Power-capping is enforced such that system has N+1 power redundancy. In this mode, the system will throttle the nodes allowing for one of the available power supplies to be held in reserve. If only one power supply is available, the system will throttle the nodes as to allow the full use of that power supply's capacity.
- **Mode 3: User Configurable Mode**
The user can specify a valid power cap value from a pre-defined range. A cap cannot be set below a minimum or above a maximum. The cap includes all server nodes, fans, and drives. User configurable mode requires an iLO Scale Out or iLO Advanced license.
- **Mode 4: Rack Level Dynamic Power Capping Mode**
In conjunction with APM, the user can specify a maximum power capacity for the entire rack. The APM dynamically allocates power to the applicable chassis within the rack to maximize performance given the available power. For more information, see the *HPE Apollo Platform Manager User Guide* on the Hewlett Packard Enterprise website (http://www.hpe.com/support/APM_UG_en).
- **Mode 5: Power Feed Redundancy Mode**
When used with an A+B power feed configuration, Power Feed Redundancy Mode throttles the system 100%, bringing the nodes to a complete stop if a power feed loss is deduced. Full throttling continues until the power feed is brought back online. In this mode, the system is expected to survive an unexpected loss of an entire power feed to half of the power supplies.

Configuring a power cap

To configure power capping, you can use the following utilities:

- HPE ProLiant Power Interface Control Utility
PPIC is a standalone utility that runs on a single server within the enclosure. For more information, see the *ProLiant Power Interface Control (PPIC) Utility User Guide* on the Hewlett Packard Enterprise website (http://www.hpe.com/support/PPIC_UG_en).
- HPE Apollo Platform Manager
APM is a rack level device that can control power caps for all enclosures in the rack. For more information, see the *HPE Apollo Platform Manager User Guide* on the Hewlett Packard Enterprise website (http://www.hpe.com/support/APM_UG_en).

Setting the chassis power cap mode with the PPIC utility

1. Download and install the ProLiant Power Interface Control Utility from the Hewlett Packard Enterprise website (<http://www.hpe.com/info/hpesc>).
2. Log in to the server, and then run the PPIC utility.
3. To set the power capacity mode, perform one of the following steps:
 - o To set mode 0, 1, and 2, enter the following command at the prompt:

```
-s -mmode
```

The following example sets the power capacity to mode 0:

```
-s -m0
```
 - o To set mode 3, enter the following command at the prompt:

```
-s -mmode -lpower
```

The following example sets the power capacity to mode 3 with a 1500W maximum power limit:

```
-s -m3 -l1500
```

Power capping modes show the valid values for `mode`. `Power` is required when setting Power Control Configuration to User Configurable.

For more information, see the *ProLiant Power Interface Control (PPIC) Utility User Guide* on the Hewlett Packard Enterprise website (http://www.hpe.com/support/PPIC_UG_en).

Setting the chassis power cap mode with HPE APM

1. Log in to APM:
 - a. When the system boots, a Login prompt appears.
 - b. At the prompt, enter `Administrator`.
2. Before setting the power cap, enter the following command to review the power baseline:

```
>show power baseline
```

The information displayed provides the minimum cap value, the maximum cap value, and the chassis that meet the requirements for power capping.
3. To set the power cap for eligible chassis connected to the APM, enter the following command at the prompt:

```
>SET POWER CAP<wattage>|NONE[zone_name]
```

The `wattage` value, if provided, represents the total wattage to be allocated among all the chassis that are part of the baseline or partial baseline of a zone, if specified. This value is divided by the total maximum wattage established by the baseline to calculate a percentage cap value. This percentage is then multiplied against each chassis maximum wattage value to arrive at an appropriate cap value for that individual chassis.

If `NONE` is specified instead of a cap wattage value, then APM removes all (or the specified zone) of the power caps.

To remove baseline data from the EEPROM and to remove the power cap setting, enter the following command:

```
>SET POWER BASELINE NONE
```

After this command is issued, the only way to re-establish a power baseline is to issue the `SET POWER BASELINE` command. The system returns to the default power cap mode (mode 1).

Troubleshooting

General troubleshooting procedures

Many problems can be resolved by starting with the following:

- Verify no loose connections (on page 64) exist.
- Search for and review any existing service notifications (on page 64).
- Power cycle the chassis ("[Power cycle the HPE Apollo 6500 System](#)" on page 64).

Loose connections

The first step to troubleshooting any issue is to verify that no loose connections exist. Verify the following:

- Be sure all power cords are securely connected.
- Be sure all cables are properly routed and securely connected for all external and internal components.
- Remove and check all data and power cables for damage. Be sure no cables have bent pins or damaged connectors.
- Be sure each device is properly seated. Avoid bending or flexing circuit boards when reseating components.
- If a device has latches, be sure they are completely closed and locked. If screws are integrated into the latch, be sure the screws are tightened properly.
- If problems continue to occur, remove and reinstall each device, checking the connectors and sockets for bent pins or other damage.

Service notifications

Service notifications are created to provide solutions for known issues with HPE ProLiant servers. Check to see if your ProLiant server issue is covered by an existing service notification.

To search for service notifications, see the Hewlett Packard Enterprise Support Center (<http://www.hpe.com/support/hpesc>). Enter the product name or number, and then click **Go**. Select **Top Issues and Solutions**, and then **Advisories Bulletins & Notices**. The complete list of documents is displayed.

Power cycle the HPE Apollo 6500 System

Many issues that require troubleshooting will require that the power be removed and re-applied to the system. Since one or two HPE Apollo d6500 Chassis can be connected to one power shelf, this will result in power being removed from all the servers installed in the chassis.

To power cycle the system:

1. Power down all servers ("[Power down the server](#)" on page 20).
2. Remove all accelerator tray power cables ("[Remove the accelerator tray power cables from the chassis](#)" on page 21).
3. Remove the chassis management module (on page 22).
4. Wait for a least 20 seconds before continuing to the next step.

5. Install the chassis management module.
6. Install all accelerator tray power cables.
7. Verify that the system power LED on the Power On/Standby button illuminates green after power on. For more LED information, see the server user guide on the Hewlett Packard Enterprise website (<http://www.hpe.com/support/Apollo6500-docs>).
 - a. If the system power LED on the Power On/Standby button is amber and does not turn green, press the Power On/Standby button.
 - b. If the system power button remains amber after pressing the Power On/Standby button, then continue to "Server does not power on (on page 65)."

Server does not power on

Description: The server does not power on when power is applied to the chassis, or when the server is installed into a chassis that has power applied.

Cause: The chassis management module is unable to communicate with the server after the server is installed.

Action: Observe the entire chassis for at least 25 minutes. Check to see if all of the servers within the chassis reboot at the same time at some point within the 25 minute window. If not, proceed as follows.

1. Power cycle the Apollo 6500 System ("[Power cycle the HPE Apollo 6500 System](#)" on page 64).
2. If power cycling the system does not resolve the issue, power down and remove one of the operational servers from the chassis. Install this operational server into the server bay in which the other server is not powering on properly.
 - o If the known operational server does not power on, replace the chassis management module board with a known good chassis management module board (spare part number is 867406-001).

For server-specific replacement procedures, see the server maintenance and service guide on the Hewlett Packard Enterprise website (<http://www.hpe.com/support/Apollo6500-docs>).
 - o If the known operational server powers on, then power down and remove it from the chassis. Install it in the original server bay. Then, install the original non-working server back into the server bay in which it did not power on properly. If it still does not power up, proceed as follows:
 - i. Remove the server and inspect the server management riser board for any damage. If it is damaged, replace the server management riser board. Check if the server powers on.
 - ii. If replacing the server management riser board does not resolve the issue, remove the system battery for at least 20 minutes to clear out the system NVRAM. Then replace the battery and install the server. Check if the server powers on.
 - iii. If replacing the system battery does not resolve the issue, it may be necessary to replace either the power distribution board or the server system board. For more information, see the server maintenance and service guide.

Electrostatic discharge

Preventing electrostatic discharge

To prevent damaging the system, be aware of the precautions you must follow when setting up the system or handling parts. A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

To prevent electrostatic damage:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

Grounding methods to prevent electrostatic discharge

Several methods are used for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 megohm \pm 10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heel straps, toe straps, or boot straps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, have an authorized reseller install the part.

For more information on static electricity or assistance with product installation, contact an authorized reseller.

Specifications

Chassis environmental specifications

Specification	Value
Temperature range¹	—
Operating ^{2,3}	10°C to 35°C (50°F to 95°F)
Nonoperating	-30°C to 60°C (-22°F to 140°F)
Maximum wet bulb temperature	—
Operating	28°C (82.4°F)
Nonoperating	38.7°C (101.7°F)
Relative humidity (non condensing)⁴	—
Operating	10% to 90%
Nonoperating	5% to 95%

¹ All temperature ratings shown are for sea level. An altitude derating of 1°C per 304.8 m (1.8°F per 1000 ft) to 3048 m (10,000 ft) is applicable. No direct sunlight allowed. Upper operating limit is 3,048 m (10,000 ft) or 70 kPa/10.1 psia. Upper nonoperating limit is 9,144 m (30,000 ft).

² If three or more NVIDIA Tesla K80 GPUs are installed on one side of the HPE ProLiant XL270d Gen9 Accelerator Tray, the inlet ambient temperature must be maintained at or below 30°C (86°F).

³ If three or more NVIDIA Tesla P100 GPUs are installed on one side of the HPE ProLiant XL270d Gen9 Accelerator Tray, the inlet ambient temperature must be maintained at or below 25°C (77°F).

⁴ Storage maximum humidity of 95% is based on a maximum temperature of 45°C (113°F). Altitude maximum for storage corresponds to a pressure minimum of 70 kPa (10.1 psia).

Chassis mechanical specifications

Specification	Value
Height	17.70 cm (6.97 in)
Depth	96.00 cm (37.79 in)
Width	44.80 cm (17.64 in)
Weight, fully-loaded	73.22 kg (161.42 lb)
Weight, lightly-loaded server with accelerator tray blank kit installed	39.12 kg (86.24 lb)

Power shelf specifications

Specification	Value
Height	6.47 cm (2.55 in)
Depth	78.44 cm (30.88 in)
Width	44.81 cm (17.64 in)
Weight, fully loaded	27.22 kg (60.00 lb)
Weight, empty	9.07 kg (20.00 lb)

Power specifications

The power requirements for the HPE Apollo d6500 Chassis are met by the following components:

- HPE 2650W Platinum Hot Plug Redundant Power Supply
- HPE Apollo 6000 Power Shelf
- AC Input Module
- Chassis Management Module

DC power

Specification	Value
Output	12V from power supplies to system chassis
Minimum (V)	+11.907
Nom (V)	+12.25
Maximum (V)	+12.593
% Reg	+2.8%/-2.8%

Single-phase power

Specification	HPE 2650W Platinum Hot Plug Redundant Power Supply
Power cord	IEC-320 C19-C20 2 m (6.5 ft)
Output	2650 W per power supply
Input requirements	
Rated input voltage	200 VAC to 240 VAC
Rated input frequency	50 Hz to 60 Hz
Rated input current per power supply (maximum)	14.4 A at 200 VAC 13.8 A at 208 VAC 13.1 A at 220 VAC
Rated input power per power supply (maximum)	2880 VA

Three-phase power (North America/Japan)

Specification	2650W Platinum Hot Plug Redundant Power Supply
Power cord	NEMA L15-30p 3.05 m (10 ft)
Output	2650 W per phase
Input requirements	
Rated input voltage	200 VAC to 208 VAC line to line 3-phase delta
Rated input frequency	50 Hz to 60 Hz
Maximum input current per line cord	25 A at 200 VAC 24 A at 208 VAC
Maximum input power per line cord	8640 VA

Three-phase power (International)

Specification	HPE 2650W Platinum Hot Plug Redundant Power Supply
Power cords (2)	IEC-309 200/380-V to 240/415-V, 5-pin, 16-A 3.05 m (10 ft)
Output	2650 W
Input requirements	
Rated input voltage	380 VAC to 415 VAC line-to-line* 220 VAC to 240 VAC line-to-neutral 3-phase WYE
Rated input frequency	50 Hz to 60 Hz
Maximum input current per line cord	13.1 A at 220/380 VAC 12 A at 240/415 VAC
Maximum input power per line cord	8646 VA

*Rated 220 VAC to 240 VAC line-to-neutral. The enclosure does not operate from higher line-to-line voltage with the WYE wall plug configuration. Input AC modules are configured to provide 220 VAC to 240 VAC to the power supplies in this system.

Hot-plug power supply calculations

For hot-plug power supply specifications and calculators to determine electrical and heat loading for the server, see the Hewlett Packard Enterprise Power Advisor website (<http://www.hpe.com/info/poweradvisor/online>).

Acronyms and abbreviations

ACU

Array Configuration Utility

BMC

baseboard management controller

CSR

Customer Self Repair

HPE APM

HPE Apollo Platform Manager (formerly named HPE Advanced Power Manager)

HPE SSA

HPE Smart Storage Administrator

iLO

Integrated Lights-Out

PDU

power distribution unit

PPIC

HPE ProLiant Power Interface Control Utility

RBSU

ROM-Based Setup Utility

SPP

Service Pack for ProLiant

UPS

uninterruptible power system

Documentation feedback

Hewlett Packard Enterprise is committed to providing documentation that meets your needs. To help us improve the documentation, send any errors, suggestions, or comments to Documentation Feedback (<mailto:docsfeedback@hpe.com>). When submitting your feedback, include the document title, part number, edition, and publication date located on the front cover of the document. For online help content, include the product name, product version, help edition, and publication date located on the legal notices page.

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