



Preface

This preface describes the objectives and organization of this guide.

- [Document Revision History, page ix](#)
- [Document Organization, page x](#)
- [Objectives, page xi](#)
- [Audience, page xi](#)
- [Related Documentation, page xii](#)
- [Conventions, page xiii](#)
- [Safety Warning Information Referral, page xiii](#)
- [Obtaining Documentation and Submitting a Service Request, page xix](#)

Document Revision History

[Table 1](#) records technical changes to this document.

Table 1 *Document Revision History*

Document Ver- sion	Date	Change Summary
—	September 29, 2016	<ul style="list-style-type: none"> • Added CDE280-2U4 support for VDS-TV
—	June 15, 2016	<ul style="list-style-type: none"> • Added CDE280 support for VDS-TV • Added CDE280 support for VQE
—	February 29, 2016	<ul style="list-style-type: none"> • Added Configuring VDS-IS CDE280 Disks • Added CDE 280 CIMC Firmware and BIOS Firmware Upgrade and downgrade
—	June 5, 2015	Added Troubleshooting tips for CDE280, and the port cable specifications for CDE.
—	April 30, 2015	Added CDE280 support for Internet Streaming
OL-16887-13	June 27, 2014	Update for VDS-TV Plymouth release.
OL-16887-12	January 13, 2014	Updated CDS to VDS, recorder information, and miscellaneous corrections

Table 1 *Document Revision History*

Document Ver- sion	Date	Change Summary
—	September 29, 2016	<ul style="list-style-type: none"> Added CDE280-2U4 support for VDS-TV
OL-16887-11	October 31, 2013	Added CDE470.
OL-16887-10	July 19, 2013	Added CDE250 2S5 support for Internet Streaming.
OL-16887-09	September 14, 2012	Added CDE460.
OL-16887-08	June 22, 2012	Added VQE Server (CDE250, model 2V0) for Visual Quality Experience (VQE), and the Very Dense TV and IS Flash Streamers (CDE250, models 2S8, 2S9 and 2S10).
OL-16887-07	October 31, 2011	Added Dense IS Streamer (CDE250, model 2M0). Updated baud information for the TV CDS installation, and the storage device removal procedure.
OL-16887-05	March 31, 2010	Added Dense Cisco Internet Streamer (CDE220, model 2S3I).
OL-16887-04	October 30, 2009	Added Flash SSD, Entry-Level Cisco TV Streamer (CDE220, model 2S1), and Dense Cisco TV Streamer (CDE220, model 2S3).
OL-16887-03	June 16, 2009	Added storage drive cautions, additional DC power connect information, and CDE220 2A-C, CDE220 2A-F, CDE420 4G-C, and CDE420 4G-F models.
OL-16887-02	April 4, 2009	Added CDE220 2G2-C model and additional DC power supply specifications. Removed CDE remanufacture instructions.
OL-16887-01	March 4, 2009	This is the first version of this document.

Document Organization

[Table 2](#) lists the chapters and appendices in this document and provides a description of each chapter and appendix.

Table 2 *List of Chapters and Appendices*

Chapter	Description
Chapter 1, “Overview of the Content Delivery Engines”	Provides a brief introduction to the Content Delivery Engines (CDEs).
Chapter 2, “Preparing to Install the Content Delivery Engines”	Contains site requirements and important safety information for working with the CDEs.
Chapter 3, “Installing the Content Delivery Engines”	Provides the necessary information to install the Videoscape Distribution Suite (VDS) hardware components.

Table 2 *List of Chapters and Appendices*

Chapter	Description
Chapter 4, “Installing the VDS Internet Streamer Software and Initially Configuring a CDE”	Describes the initial installation of the VDS-IS software application onto the CDEs, and the initial configuration of the CDEs using the Content Delivery System Manager (CDSM).
Chapter 5, “Installing the VDS-TV Software and Initially Configuring a CDE”	Describes the initial installation of the VDS-TV software application onto the CDEs, and the initial configuration of the CDEs using the Content Delivery System Manager (CDSM).
Chapter 6, “Installing the VQE and Initially Configuring a CDE”	Describes the initial installation of the VQE software application onto the CDEs, and the initial configuration of the CDEs using the Content Delivery System Manager (CDSM).
Appendix A, “Technical Specifications”	Provides the CDE specifications.
Appendix B, “Connector Pin Assignments”	Lists the connector pin assignments for the CDEs.
Appendix C, “Power Cord Specifications”	Describes the power cord specification for CDEs.
Appendix D, “CDE-280 Troubleshooting Tips”	Provides the trouble shooting tips for CDE280.
Appendix E, “Configuring VDS-IS CDE280 Disks”	Describes the configuration details of VDS-IS.
Appendix F, “VDS-IS and VQE CDE-280 CIMC / BIOS Firmware”	Provides some CIMC troubleshooting tips and common troubleshooting scenarios for CDE-280 Service Engine.

Objectives

This guide documents the hardware features of the next-generation Cisco Content Delivery Engines (CDEs), which include CDE205, CDE220, CDE250, CDE280, CDE420, CDE460, and CDE470 when these platforms are used in Internet Streamer and TV applications. It describes the physical and performance characteristics of each CDE, explains how to install a CDE, and provides troubleshooting information. This guide does not describe system messages that you may receive and provides only initial configuration procedures. For more information, see the [“Related Documentation”](#) section on page xii.



Note

The CDE280 engine is supported with the VDS-IS Software Applications only.

Audience

This guide is for the networking or computer technician responsible for installing the CDE hardware. You should be familiar with the concepts and terminology of Ethernet and local area networking.

Related Documentation

These documents provide complete information about the VDS (formerly CDS) and are available from cisco.com:

- [Cisco Internet Streamer CDS Software Configuration Guide](#)
- [Cisco Internet Streamer CDS Command Reference](#)
- [Cisco Internet Streamer CDS Alarms and Error Messages Guide](#)
- [Cisco Internet Streamer CDS Quick Start Guide](#)
- [Cisco Internet Streamer CDS API Guide](#)
- [Release Notes for Cisco Internet Streamer CDS](#)
- [Cisco Internet Streamer CDS Installation Guide](#)
- [Cisco TV VDS ISA Configuration Guide](#)
- [Cisco TV VDS RTSP Configuration Guide](#)
- [Cisco TV VDS API Guide](#)
- [Cisco TV CDS Installation, Upgrade, and Maintenance Guide](#)

These documents provide complete information about the Cisco CDA Visual Quality Experience (VQE) and are available from cisco.com:

- [Release Notes for Cisco CDA Visual Quality Experience Application Release 3.11](#)
- [Release Notes for Cisco CDA Visual Quality Experience Application Release 3.8](#)
- [Release Notes for Cisco CDA Visual Quality Experience Application, Release 3.6](#)
- [Cisco CDA Visual Quality Experience Application User Guide, Release 3.3](#)

You can access the VDS-IS software documents at the following URL:

http://www.cisco.com/en/US/products/ps7127/tsd_products_support_series_home.html

You can access the VDS-TV software documents at the following URL:

http://www.cisco.com/en/US/products/ps12653/tsd_products_support_series_home.html

You can access the hardware documents at the following URL:

http://www.cisco.com/en/US/products/ps7126/tsd_products_support_series_home.html

These documents provide complete information about the installation and service of the C200 and C210 and are available from cisco.com.

- Cisco UCS C200 Installation and Service Guide

http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C200M1/install/c200M1.html

- Cisco UCS C210 Installation and Service Guide

http://www.cisco.com/en/US/docs/unified_computing/ucs/c/hw/C210M1/install/C210M1.html

The Cisco UCS C-Series Rack Servers documentation is available from cisco.com at:

http://www.cisco.com/en/US/products/ps10493/prod_installation_guides_list.html

Conventions



Note

Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this publication.



Caution

Means *reader be careful*. In this situation, you might do something that could result in equipment damage or loss of data.

Safety Warning Information Referral

See the foreign language translations of all warnings used in the *Regulatory Compliance and Safety Information for the Cisco Content Delivery Engines* document at this URL:

http://www.cisco.com/en/US/docs/video/cds/cde/regulatory/compliance/CDE_RCSI.html

See the foreign language translations of all warnings used in the *Regulatory Compliance and Safety Information for the Cisco UCS C-Series, Cisco C880 Series, and C-Series-Based Appliances* document at this URL:

http://www.cisco.com/c/en/us/td/docs/unified_computing/ucs/c/regulatory/compliance/cseries_regulatory_compliance_information.html

Warning Definition



Warning

IMPORTANT SAFETY INSTRUCTIONS

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. Use the statement number provided at the end of each warning to locate its translation in the translated safety warnings that accompanied this device.

SAVE THESE INSTRUCTIONS

Waarschuwing BELANGRIJKE VEILIGHEIDSINSTRUCTIES

Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van de standaard praktijken om ongelukken te voorkomen. Gebruik het nummer van de verklaring onderaan de waarschuwing als u een vertaling van de waarschuwing die bij het apparaat wordt geleverd, wilt raadplegen.

BEWAAR DEZE INSTRUCTIES

Varoitus TÄRKEITÄ TURVALLISUUSOHJEITA

Tämä varoitusmerkki merkitsee vaaraa. Tilanne voi aiheuttaa ruumiillisia vammoja. Ennen kuin käsittelet laitteistoa, huomioi sähköpiirien käsittelemiseen liittyvät riskit ja tutustu onnettomuuksien yleisiin ehkäisytapoihin. Turvallisuusvaroitusten käännökset löytyvät laitteen mukana toimitettujen käännettyjen turvallisuusvaroitusten joukosta varoitusten lopussa näkyvien lausuntonumeroiden avulla.

SÄILYTÄ NÄMÄ OHJEET

Attention IMPORTANTES INFORMATIONS DE SÉCURITÉ

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures ou des dommages corporels. Avant de travailler sur un équipement, soyez conscient des dangers liés aux circuits électriques et familiarisez-vous avec les procédures couramment utilisées pour éviter les accidents. Pour prendre connaissance des traductions des avertissements figurant dans les consignes de sécurité traduites qui accompagnent cet appareil, référez-vous au numéro de l'instruction situé à la fin de chaque avertissement.

CONSERVEZ CES INFORMATIONS

Warnung WICHTIGE SICHERHEITSHINWEISE

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu Verletzungen führen kann. Machen Sie sich vor der Arbeit mit Geräten mit den Gefahren elektrischer Schaltungen und den üblichen Verfahren zur Vorbeugung vor Unfällen vertraut. Suchen Sie mit der am Ende jeder Warnung angegebenen Anweisungsnummer nach der jeweiligen Übersetzung in den übersetzten Sicherheitshinweisen, die zusammen mit diesem Gerät ausgeliefert wurden.

BEWAHREN SIE DIESE HINWEISE GUT AUF.

Avvertenza IMPORTANTI ISTRUZIONI SULLA SICUREZZA

Questo simbolo di avvertenza indica un pericolo. La situazione potrebbe causare infortuni alle persone. Prima di intervenire su qualsiasi apparecchiatura, occorre essere al corrente dei pericoli relativi ai circuiti elettrici e conoscere le procedure standard per la prevenzione di incidenti. Utilizzare il numero di istruzione presente alla fine di ciascuna avvertenza per individuare le traduzioni delle avvertenze riportate in questo documento.

CONSERVARE QUESTE ISTRUZIONI

Advarsel VIKTIGE SIKKERHETSINSTRUKSJONER

Dette advarselssymbolet betyr fare. Du er i en situasjon som kan føre til skade på person. Før du begynner å arbeide med noe av utstyret, må du være oppmerksom på farene forbundet med elektriske kretser, og kjenne til standardprosedyrer for å forhindre ulykker. Bruk nummeret i slutten av hver advarsel for å finne oversettelsen i de oversatte sikkerhetsadvarslene som fulgte med denne enheten.

TA VARE PÅ DISSE INSTRUKSJONENE

Aviso INSTRUÇÕES IMPORTANTES DE SEGURANÇA

Este símbolo de aviso significa perigo. Você está em uma situação que poderá ser causadora de lesões corporais. Antes de iniciar a utilização de qualquer equipamento, tenha conhecimento dos perigos envolvidos no manuseio de circuitos elétricos e familiarize-se com as práticas habituais de prevenção de acidentes. Utilize o número da instrução fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham este dispositivo.

GUARDE ESTAS INSTRUÇÕES

¡Advertencia! INSTRUCCIONES IMPORTANTES DE SEGURIDAD

Este símbolo de aviso indica peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considere los riesgos de la corriente eléctrica y familiarícese con los procedimientos estándar de prevención de accidentes. Al final de cada advertencia encontrará el número que le ayudará a encontrar el texto traducido en el apartado de traducciones que acompaña a este dispositivo.

GUARDE ESTAS INSTRUCCIONES

Varning! VIKTIGA SÄKERHETSANVISNINGAR

Denna varningssignal signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanliga förfaranden för att förebygga olyckor. Använd det nummer som finns i slutet av varje varning för att hitta dess översättning i de översatta säkerhetsvarningar som medföljer denna anordning.

SPARA DESSA ANVISNINGAR

Figyelem FONTOS BIZTONSÁGI ELOÍRÁSOK

Ez a figyelmeztető jel veszélyre utal. Sérülésveszélyt rejte helyzetben van. Mielott bármely berendezésen munkát végezte, legyen figyelemmel az elektromos áramkörök okozta kockázatokra, és ismerkedjen meg a szokásos balesetvédelmi eljárásokkal. A kiadványban szereplő figyelmeztetések fordítása a készülékhez mellékelt biztonsági figyelmeztetések között található; a fordítás az egyes figyelmeztetések végén látható szám alapján kereshető meg.

ORIZZE MEG EZEKET AZ UTASÍTÁSOKAT!

Предупреждение **ВАЖНЫЕ ИНСТРУКЦИИ ПО СОБЛЮДЕНИЮ ТЕХНИКИ БЕЗОПАСНОСТИ**

Этот символ предупреждения обозначает опасность. То есть имеет место ситуация, в которой следует опасаться телесных повреждений. Перед эксплуатацией оборудования выясните, каким опасностям может подвергаться пользователь при использовании электрических цепей, и ознакомьтесь с правилами техники безопасности для предотвращения возможных несчастных случаев. Воспользуйтесь номером заявления, приведенным в конце каждого предупреждения, чтобы найти его переведенный вариант в переводе предупреждений по безопасности, прилагаемом к данному устройству.

СОХРАНИТЕ ЭТИ ИНСТРУКЦИИ

警告 重要的安全性说明

此警告符号代表危险。您正处于可能受到严重伤害的工作环境中。在您使用设备开始工作之前，必须充分意识到触电的危险，并熟练掌握防止事故发生的标准工作程序。请根据每项警告结尾提供的声明号码来找到此设备的安全性警告说明的翻译文本。

请保存这些安全性说明

警告 安全上の重要な注意事項

「危険」の意味です。人身事故を予防するための注意事項が記述されています。装置の取り扱い作業を行うときは、電気回路の危険性に注意し、一般的な事故防止策に留意してください。警告の各国語版は、各注意事項の番号を基に、装置に付属の「Translated Safety Warnings」を参照してください。

これらの注意事項を保管しておいてください。

주의 중요 안전 지침

이 경고 기호는 위험을 나타냅니다. 작업자가 신체 부상을 일으킬 수 있는 위험한 환경에 있습니다. 장비에 작업을 수행하기 전에 전기 회로와 관련된 위험을 숙지하고 표준 작업 관례를 숙지하여 사고를 방지하십시오. 각 경고의 마지막 부분에 있는 경고문 번호를 참조하여 이 장치와 함께 제공되는 번역된 안전 경고문에서 해당 번역문을 찾으십시오.

이 지시 사항을 보관하십시오.

Aviso **INSTRUÇÕES IMPORTANTES DE SEGURANÇA**

Este símbolo de aviso significa perigo. Você se encontra em uma situação em que há risco de lesões corporais. Antes de trabalhar com qualquer equipamento, esteja ciente dos riscos que envolvem os circuitos elétricos e familiarize-se com as práticas padrão de prevenção de acidentes. Use o número da declaração fornecido ao final de cada aviso para localizar sua tradução nos avisos de segurança traduzidos que acompanham o dispositivo.

GUARDE ESTAS INSTRUÇÕES

Advarsel **VIGTIGE SIKKERHEDSANVISNINGER**

Dette advarselssymbol betyder fare. Du befinder dig i en situation med risiko for legemeskadedigelse. Før du begynder arbejde på udstyr, skal du være opmærksom på de involverede risici, der er ved elektriske kredsløb, og du skal sætte dig ind i standardprocedurer til undgåelse af ulykker. Brug erklæringsnummeret efter hver advarsel for at finde oversættelsen i de oversatte advarsler, der fulgte med denne enhed.

GEM DISSE ANVISNINGER

تحذير

إرشادات الأمان الهامة

يوضح رمز التحذير هذا وجود خطر. وهذا يعني أنك متواجد في مكان قد ينتج عنه التعرض لإصابات. قبل بدء العمل، احذر مخاطر التعرض للصدمات الكهربائية وكن على علم بالإجراءات القياسية للحيلولة دون وقوع أي حوادث. استخدم رقم البيان الموجود في أحر كل تحذير لتحديد مكان ترجمته داخل تحذيرات الأمان المترجمة التي تأتي مع الجهاز. قم بحفظ هذه الإرشادات

Upozorenje **VAŽNE SIGURNOSNE NAPOMENE**

Ovaj simbol upozorenja predstavlja opasnost. Nalazite se u situaciji koja može prouzročiti tjelesne ozljede. Prije rada s bilo kojim uređajem, morate razumjeti opasnosti vezane uz električne sklopove, te biti upoznati sa standardnim načinima izbjegavanja nesreća. U prevedenim sigurnosnim upozorenjima, priloženima uz uređaj, možete prema broju koji se nalazi uz pojedino upozorenje pronaći i njegov prijevod.

SAČUVAJTE OVE UPUTE

Upozornění **DŮLEŽITÉ BEZPEČNOSTNÍ POKYNY**

Tento upozorňující symbol označuje nebezpečí. Jste v situaci, která by mohla způsobit nebezpečí úrazu. Před prací na jakémkoliv vybavení si uvědomte nebezpečí související s elektrickými obvody a seznamte se se standardními opatřeními pro předcházení úrazům. Podle čísla na konci každého upozornění vyhledejte jeho překlad v přeložených bezpečnostních upozorněních, která jsou přiložena k zařízení.

USCHOVEJTE TYTO POKYNY

Προειδοποίηση **ΣΗΜΑΝΤΙΚΕΣ ΟΔΗΓΙΕΣ ΑΣΦΑΛΕΙΑΣ**

Αυτό το προειδοποιητικό σύμβολο σημαίνει κίνδυνο. Βρίσκεστε σε κατάσταση που μπορεί να προκαλέσει τραυματισμό. Πριν εργαστείτε σε οποιοδήποτε εξοπλισμό, να έχετε υπόψη σας τους κινδύνους που σχετίζονται με τα ηλεκτρικά κυκλώματα και να έχετε εξοικειωθεί με τις συνήθεις πρακτικές για την αποφυγή ατυχημάτων. Χρησιμοποιήστε τον αριθμό δήλωσης που παρέχεται στο τέλος κάθε προειδοποίησης, για να εντοπίσετε τη μετάφρασή της στις μεταφρασμένες προειδοποιήσεις ασφαλείας που συνοδεύουν τη συσκευή.

ΦΥΛΑΞΤΕ ΑΥΤΕΣ ΤΙΣ ΟΔΗΓΙΕΣ

אזהרה

הוראות בטיחות חשובות

סימן אזהרה זה מסמל סכנה. אתה נמצא במצב העלול לגרום לפציעה. לפני שתעבוד עם ציוד כלשהו, עליך להיות מודע לסכנות הכרוכות במעגלים חשמליים ולהכיר את הנהלים המקובלים למניעת תאונות. השתמש במספר ההוראה המסופק בסופה של כל אזהרה כדי לאתר את התרגום באזהרות הבטיחות המתורגמות שמצורפות להתקן.

שמור הוראות אלה

Opomena

ВАЖНИ БЕЗБЕДНОСНИ НАПАТСТВИЈА

Симболот за предупредување значи опасност. Се наоѓате во ситуација што може да предизвика телесни повреди. Пред да работите со опремата, бидете свесни за ризикот што постои кај електричните кола и треба да ги познавате стандардните постапки за спречување на несреќни случаи. Искористете го бројот на изјавата што се наоѓа на крајот на секое предупредување за да го најдете неговиот период во преведените безбедносни предупредувања што се испорачани со уредот.
ЧУВАЈТЕ ГИ ОБИЕ НАПАТСТВИЈА

Ostrzeżenie

WAŻNE INSTRUKCJE DOTYCZĄCE BEZPIECZEŃSTWA

Ten symbol ostrzeżenia oznacza niebezpieczeństwo. Zachodzi sytuacja, która może powodować obrażenia ciała. Przed przystąpieniem do prac przy urządzeniach należy zapoznać się z zagrożeniami związanymi z układami elektrycznymi oraz ze standardowymi środkami zapobiegania wypadkom. Na końcu każdego ostrzeżenia podano numer, na podstawie którego można odszukać tłumaczenie tego ostrzeżenia w dołączonym do urządzenia dokumencie z tłumaczeniami ostrzeżeń.

NINIEJSZE INSTRUKCJE NALEŻY ZACHOWAĆ

Upozornenie

DÔLEŽITÉ BEZPEČNOSTNÉ POKYNY

Tento varovný symbol označuje nebezpečenstvo. Nachádzate sa v situácii s nebezpečenstvom úrazu. Pred prácou na akomkoľvek vybavení si uvedomte nebezpečenstvo súvisiace s elektrickými obvodmi a oboznámte sa so štandardnými opatreniami na predchádzanie úrazom. Podľa čísla na konci každého upozornenia vyhľadajte jeho preklad v preložených bezpečnostných upozorneniach, ktoré sú priložené k zariadeniu.

USCHOVAJTE SI TENTO NÁVOD

Opozorilo **POMEMBNI VARNOSTNI NAPOTKI**

Ta opozorilni simbol pomeni nevarnost. Nahajate se v situaciji, kjer lahko pride do telesnih poškodb. Preden pričnete z delom na napravi, se morate zavedati nevarnosti udara električnega toka, ter tudi poznati preventivne ukrepe za preprečevanje takšnih nevarnosti. Uporabite obrazložitveno številko na koncu posameznega opozorila, da najdete opis nevarnosti v priloženem varnostnem priročniku.

SHRANITE TE NAPOTKE!

警告 **重要安全性指示**
此警告符號代表危險，表示可能造成人身傷害。使用任何設備前，請留心電路相關危險，並熟悉避免意外的標準作法。您可以使用每項警告後的聲明編號，查詢本裝置隨附之安全性警告譯文中的翻譯。請妥善保留此指示

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at the following URL:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

