

Optima EMS ECG Management System Database Backup and Recovery Instruction

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Publication Information

The information in this manual applies only to Optima EMS ECG Management System Version 1.0. It does not apply to earlier product versions. Due to continuing product innovation, specifications in this manual are subject to change without notice.

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The document part number and revision appear at the bottom of each page. The revision identifies the document's update level. The revision history of this document is summarized in the following table.

Revision	Date	Comments
A	1 November 2012	Internal Release
B	10 December 2012	Initial release for customer

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Service Manual Language Information

WARNING (EN)	<p>This service manual is available in English only.</p> <ul style="list-style-type: none">• If a customer's service provider requires a language other than English, it is the customer's responsibility to provide translation services.• Do not attempt to service the equipment unless this service manual has been consulted and is understood.• Failure to heed this warning may result in injury to the service provider, operator, or patient, from electric shock, mechanical or other hazards.
ПРЕДУПРЕЖДЕНИЕ (BG)	<p>Това упътване за работа е налично само на английски език.</p> <ul style="list-style-type: none">• Ако доставчикът на услугата на клиента изиска друг език, задължение на клиента е да осигури превод.• Не използвайте оборудването, преди да сте се консултирали и разбрали упътването за работа.• Неспазването на това предупреждение може да доведе до нараняване на доставчика на услугата, оператора или пациент в резултат на токов удар или механична или друга опасност.
警告 ZH-CN	<p>本维修手册仅提供英文版本。</p> <ul style="list-style-type: none">• 如果维修服务提供商需要非英文版本，客户需自行提供翻译服务。• 未详细阅读和完全理解本维修手册之前，不得进行维修。• 忽略本警告可能对维修人员，操作员或患者造成触电、机械伤害或其他形式的伤害。
警告 (ZH-TW)	<p>本維修手冊只提供英文版。</p> <ul style="list-style-type: none">• 如果客戶的維修人員有英語以外的其他語言版本需求，則由該客戶負責提供翻譯服務。• 除非您已詳閱本維修手冊並了解其內容，否則切勿嘗試對本設備進行維修。• 不重視本警告可能導致維修人員、操作人員或病患因電擊、機械因素或其他因素而受到傷害。

Service Manual Language Information (cont'd.)

UPOZORENJE (HR)	<p>Ove upute za servisiranje dostupne su samo na engleskom jeziku.</p> <ul style="list-style-type: none"> • Ukoliko korisnički servis zahtijeva neki drugi jezik, korisnikova je odgovornost osigurati odgovarajući prijevod. • Nemojte pokušavati servisirati opremu ukoliko niste konzultirali i razumjeli ove upute. • Nepoštivanje ovog upozorenja može rezultirati ozljedama servisnog osoblja, korisnika ili pacijenta prouzročenim električnim udarom te mehaničkim ili nekim drugim opasnostima.
VAROVÁNÍ (CS)	<p>Tento provozní návod existuje pouze v anglickém jazyce.</p> <ul style="list-style-type: none"> • V případě, že externí služba zákazníkům potřebuje návod v jiném jazyce, je zajištění překladu do odpovídajícího jazyka úkolem zákazníka. • Nesnažte se o údržbu tohoto zařízení, aniž byste si přečetli tento provozní návod a pochopili jeho obsah. • V případě nedodržování této varování může dojít k poranění pracovníka prodejního servisu, obslužného personálu nebo pacientů vlivem elektrického proudu, respektive vlivem mechanických či jiných rizik.
ADVARSEL (DA)	<p>Denne servicemanual findes kun på engelsk.</p> <ul style="list-style-type: none"> • Hvis en kundes tekniker har brug for et andet sprog end engelsk, er det kundens ansvar at sørge for oversættelse. • Forsøg ikke at servicere udstyret medmindre denne servicemanual har været konsulteret og er forstået. • Manglende overholdelse af denne advarsel kan medføre skade på grund af elektrisk, mekanisk eller anden fare for tekniker, operatøren eller patienten.
WAARSCHUWING (NL)	<p>Deze service manual is alleen in het Engels verkrijgbaar.</p> <ul style="list-style-type: none"> • Indien het onderhoudspersoneel een andere taal nodig heeft, dan is de klant verantwoordelijk voor de vertaling ervan. • Probeer de apparatuur niet te onderhouden voordat deze service manual geraadpleegd en begrepen is. • Indien deze waarschuwing niet wordt opgevolgd, zou het onderhoudspersoneel, de gebruiker of een patiënt gewond kunnen raken als gevolg van een elektrische schok, mechanische of andere gevaren.
HOIATUS (ET)	<p>Käesolev teenindusjuhend on saadaval ainult inglise keeles.</p> <ul style="list-style-type: none"> • Kui klienditeeninduse osutaja nõuab juhendit inglise keelest erinevas keeles, vastutab klient tõlketeenuse osutamise eest. • Ärge üritage seadmeid teenindada enne eelnevalt käesoleva teenindusjuhendiga tutvumist ja sellest aru saamist. • Käesoleva hoiatuse eiramine võib põhjustada teenuseosutaja, operaatori või patsiendi vigastamist elektrilöögi, mehaanilise või muu ohu tagajärjel.
VAROITUS (FI)	<p>Tämä huolto-ohje on saatavilla vain englanniksi.</p> <ul style="list-style-type: none"> • Jos asiakkaan huoltohenkilöstö vaatii muuta kuin englanninkielistä materiaalia, tarvittavan käännöksen hankkiminen on asiakkaan vastuulla. • Älä yritä korjata laitteistoa ennen kuin olet varmasti lukenut ja ymmärtänyt tämän huolto-ohjeen. • Mikäli tätä varoitusta ei noudateta, seurauksena voi olla huoltohenkilöstön, laitteiston käyttäjän tai potilaan vahingoittuminen sähköiskun, mekaanisen vian tai muun vaaratilanteen vuoksi.

Service Manual Language Information (cont'd.)

ATTENTION (FR)	<p>Ce manuel technique n'est disponible qu'en anglais.</p> <ul style="list-style-type: none"> • Si un service technique client souhaite obtenir ce manuel dans une autre langue que l'anglais, il devra prendre en charge la traduction et la responsabilité du contenu. • Ne pas tenter d'intervenir sur les équipements tant que le manuel technique n'a pas été consulté et compris. • Le non-respect de cet avertissement peut entraîner chez le technicien, l'opérateur ou le patient des blessures dues à des dangers électriques, mécaniques ou autres.
WARNUNG (DE)	<p>Diese Serviceanleitung ist nur in englischer Sprache verfügbar.</p> <ul style="list-style-type: none"> • Falls der Kundendienst eine andere Sprache benötigt, muss er für eine entsprechende Übersetzung sorgen. • Keine Wartung durchführen, ohne diese Serviceanleitung gelesen und verstanden zu haben. • Bei Zuwiderhandlung kann es zu Verletzungen des Kundendiensttechnikers, des Anwenders oder des Patienten durch Stromschläge, mechanische oder sonstige Gefahren kommen.
ΠΡΟΕΙΔΟΠΟΙΗΣΗ (GR)	<p>Το παρόν εγχειρίδιο σέρβις διατίθεται στα αγγλικά μόνο.</p> <ul style="list-style-type: none"> • Εάν το άτομο παροχής σέρβις ενός πελάτη απαιτεί το παρόν εγχειρίδιο σε γλώσσα εκτός των αγγλικών, αποτελεί ευθύνη του πελάτη να παρέχει υπηρεσίες μετάφρασης. • Μην επιχειρήσετε την εκτέλεση εργασιών σέρβις στον εξοπλισμό εκτός εάν έχετε συμβουλευτεί και έχετε κατανοήσει το παρόν εγχειρίδιο σέρβις. • Εάν δεν λάβετε υπόψη την προειδοποίηση αυτή, ενδέχεται να προκληθεί τραυματισμός στο άτομο παροχής σέρβις, στο χειριστή ή στον ασθενή από ηλεκτροπληξία, μηχανικούς ή άλλους κινδύνους.
FIGYELMEZTETÉS (HU)	<p>Ez a szerviz kézikönyv kizárólag angol nyelven érhető el.</p> <ul style="list-style-type: none"> • Ha a vevő szerviz ellátója angoltól eltérő nyelvre tart igényt, akkor a vevő felelőssége a fordítás elkészítése. • Ne próbálja elkezdni használni a berendezést, amíg a szerviz kézikönyvben leírtakat nem értelmezték és értették meg. • Ezen figyelmeztetés figyelmen kívül hagyása a szerviz ellátó, a működtető vagy a páciens áramütés, mechanikai vagy egyéb veszélyhelyzet miatti sérülését eredményezheti.
ADVÖRUN (IS)	<p>Þessi þjónustuhandbók er eingöngu fáanleg á ensku.</p> <ul style="list-style-type: none"> • Ef að þjónustuveitandi viðskiptamanns þarfnast annars tungumáls en ensku, er það skylda viðskiptamanns að skaffa tungumálþjónustu. • Reynið ekki að afgreiða tækið nema þessi þjónustuhandbók hefur verið skoðuð og skilin. • Brot á að sinna þessari aðvörun getur leitt til meiðsla á þjónustuveitanda, stjórnanda eða sjúklingi frá raflosti, vélrænum eða öðrum áhættum.
PERINGATAN (ID)	<p>Manual servis ini hanya tersedia dalam bahasa Inggris.</p> <ul style="list-style-type: none"> • Jika penyedia jasa servis pelanggan memerlukan bahasa lain selain dari Bahasa Inggris, merupakan tanggung jawab dari penyedia jasa servis tersebut untuk menyediakan terjemahannya. • Jangan mencoba melakukan servis terhadap perlengkapan kecuali telah membaca dan memahami manual servis ini. • Mengabaikan peringatan ini bisa mengakibatkan cedera pada penyedia servis, operator, atau pasien, karena terkena kejut listrik, bahaya mekanis atau bahaya lainnya.

Service Manual Language Information (cont'd.)

AVVERTENZA (IT)	<p>Il presente manuale di manutenzione è disponibile soltanto in Inglese.</p> <ul style="list-style-type: none"> Se un addetto alla manutenzione richiede il manuale in una lingua diversa, il cliente è tenuto a provvedere direttamente alla traduzione. Si proceda alla manutenzione dell'apparecchiatura solo dopo aver consultato il presente manuale ed averne compreso il contenuto. Il non rispetto della presente avvertenza potrebbe far compiere operazioni da cui derivino lesioni all'addetto, alla manutenzione, all'utilizzatore ed al paziente per folgorazione elettrica, per urti meccanici od altri rischi.
警告 (JA)	<p>このサービスマニュアルは英語版しかありません。</p> <ul style="list-style-type: none"> サービスを担当される業者が英語以外の言語を要求される場合、翻訳作業はその業者の責任で行うものとさせていただきます。 このサービスマニュアルを熟読し、十分に理解をした上で装置のサービスを行ってください。 この警告に従わない場合、サービスを担当される方、操作員あるいは患者が、感電や機械的又はその他の危険により負傷する可能性があります。
경고 (KO)	<p>본 서비스 지침서는 영어로만 이용하실 수 있습니다.</p> <ul style="list-style-type: none"> 고객의 서비스 제공자가 영어 이외의 언어를 요구할 경우, 번역 서비스를 제공하는 것은 고객의 책임입니다. 본 서비스 지침서를 참고했고 이해하지 않는 한은 해당 장비를 수리하려고 시도하지 마십시오. 이 경고에 유의하지 않으면 전기 쇼크, 기계상의 혹은 다른 위험으로부터 서비스 제공자, 운영자 혹은 환자에게 위험을 가할 수 있습니다.
BRĪDINĀJUMS (LV)	<p>Šī apkalpotāju rokasgrāmata ir pieejama tikai anglu valodā.</p> <ul style="list-style-type: none"> Ja apkalpošanas sniedzējam nepieciešama informācija citā, nevis anglu, valodā, klienta pienākums ir nodrošināt tās tulkošanu. Neveiciet aprīkojuma apkopi, neizlasot un nesaprotot apkalpotāju rokasgrāmatu. Šī brīdinājuma neievērošana var radīt elektriskās strāvas trieciena, mehānisku vai citu risku izraisītu traumu apkopes sniedzējam, operatoram vai pacientam.
ĮSPĖJIMAS (LT)	<p>Šis eksploataavimo vadovas yra prieinamas tik anglų kalba.</p> <ul style="list-style-type: none"> Jei kliento paslaugų tiekėjas reikalauja vadovo kita kalba - ne anglų, numatyti vertimo paslaugas yra kliento atsakomybė. Nemėginkite atlikti įrangos techninės priežiūros, nebent atsižvelgėte į šį eksploataavimo vadovą ir jį supratote. Jei neatkreipsite dėmesio į šį perspėjimą, galimi sužalojimai dėl elektros šoko, mechaninių ar kitų paslaugų tiekėjui, operatoriui ar pacientui.
ADVARSEL (NO)	<p>Denne servicehåndboken finnes bare på engelsk.</p> <ul style="list-style-type: none"> Hvis kundens serviceleverandør trenger et annet språk, er det kundens ansvar å sørge for oversettelse. Ikke forsøk å reparere utstyret uten at denne servicehåndboken er lest og forstått. Manglende hensyn til denne advarselen kan føre til at serviceleverandøren, operatøren eller pasienten skades på grunn av elektrisk støt, mekaniske eller andre farer.

Service Manual Language Information (cont'd.)

<p>OSTRZEŻENIE (PL)</p>	<p>Niniejszy podręcznik serwisowy dostępny jest jedynie w języku angielskim.</p> <ul style="list-style-type: none"> • Jeśli dostawca usług klienta wymaga języka innego niż angielski, zapewnienie usługi tłumaczenia jest obowiązkiem klienta. • Nie należy serwisować wyposażenia bez zapoznania się i zrozumienia niniejszego podręcznika serwisowego. • Niezastosowanie się do tego ostrzeżenia może spowodować urazy dostawcy usług, operatora lub pacjenta w wyniku porażenia elektrycznego, zagrożenia mechanicznego bądź innego.
<p>AVISO (PT-BR)</p>	<p>Este manual de assistência técnica só se encontra disponível em inglês.</p> <ul style="list-style-type: none"> • Se o serviço de assistência técnica do cliente não for GE, e precisar de outro idioma, será da responsabilidade do cliente fornecer os serviços de tradução. • Não tente reparar o equipamento sem ter consultado e compreendido este manual de assistência técnica. • O não cumprimento deste aviso pode por em perigo a segurança do técnico, operador ou paciente devido a choques elétricos, mecânicos ou outros.
<p>AVISO (PT-PT)</p>	<p>Este manual técnico só se encontra disponível em inglês.</p> <ul style="list-style-type: none"> • Se a assistência técnica do cliente solicitar estes manuais noutro idioma, é da responsabilidade do cliente fornecer os serviços de tradução. • Não tente reparar o equipamento sem ter consultado e compreendido este manual técnico. • O não cumprimento deste aviso pode provocar lesões ao técnico, ao utilizador ou ao paciente devido a choques eléctricos, mecânicos ou outros.
<p>AVERTISMENT (RO)</p>	<p>Acest manual de service este disponibil numai în limba engleză.</p> <ul style="list-style-type: none"> • Dacă un furnizor de servicii pentru clienți necesită o altă limbă decât cea engleză, este de datoria clientului să furnizeze o traducere. • Nu încercați să reparați echipamentul decât ulterior consultării și înțelegerii acestui manual de service. • Ignorarea acestui avertisment ar putea duce la rănirea depănatorului, operatorului sau pacientului în urma pericolelor de electrocutare, mecanice sau de altă natură.
<p>ПРЕДУПРЕЖДЕНИЕ (RU)</p>	<p>Настоящее руководство по обслуживанию предлагается только на английском языке.</p> <ul style="list-style-type: none"> • Если сервисному персоналу клиента необходимо руководство не на английском, а на каком-то другом языке, клиенту следует обеспечить перевод самостоятельно. • Прежде чем приступать к обслуживанию оборудования, обязательно обратитесь к настоящему руководству и внимательно изучите изложенные в нем сведения. • Несоблюдение требований данного предупреждения может привести к тому, что специалисты по обслуживанию, операторы или пациенты получат удар электрическим током, механическую травму или другое повреждение.
<p>UPOZORENJE (SR)</p>	<p>Ovo servisno uputstvo je dostupno samo na engleskom jeziku.</p> <ul style="list-style-type: none"> • Ako klijentov serviser zahteva neki drugi jezik, klijent je dužan da obezbedi prevodilačke usluge. • Ne pokušavajte da opravite uređaj ako niste pročitali i razumeli ovo servisno uputstvo. • Zanemarivanje ovog upozorenja može dovesti do povređivanja serviser, rukovaoca ili pacijenta usled strujnog udara, ili mehaničkih i drugih opasnosti.

Service Manual Language Information (cont'd.)

VAROVANIE (SK)	<p>Tento návod na obsluhu je k dispozícii len v angličtine.</p> <ul style="list-style-type: none"> • Ak zákazníkovi poskytovateľ služieb vyžaduje iný jazyk ako angličtinu, poskytnutie prekladateľských služieb je zodpovednosťou zákazníka. • Nepokúšajte sa o obsluhu zariadenia skôr, ako si neprečítate návod na obsluhu a neporozumiete mu. • Zanedbanie tohto varovania môže vyústiť do zranenia poskytovateľa služieb, obsluhujúcej osoby alebo pacienta elektrickým prúdom, mechanickým alebo iným nebezpečenstvom.
OPOZORILO (SL)	<p>Ta servisni priročnik je na voljo samo v angleškem jeziku.</p> <ul style="list-style-type: none"> • Če ponudnik storitve stranke potrebuje priročnik v drugem jeziku, mora stranka zagotoviti prevod. • Ne poskušajte servisirati opreme, če tega priročnika niste v celoti prebrali in razumeli. • Če tega opozorila ne upoštevate, se lahko zaradi električnega udara, mehanskih ali drugih nevarnosti poškoduje ponudnik storitev, operater ali bolnik.
ADVERTENCIA (ES)	<p>Este manual de servicio sólo existe en inglés.</p> <ul style="list-style-type: none"> • Si el encargado de mantenimiento de un cliente necesita un idioma que no sea el inglés, el cliente deberá encargarse de la traducción del manual. • No se deberá dar servicio técnico al equipo, sin haber consultado y comprendido este manual de servicio. • La no observancia del presente aviso puede dar lugar a que el proveedor de servicios, el operador o el paciente sufran lesiones provocadas por causas eléctricas, mecánicas o de otra naturaleza.
VARNING (SV)	<p>Den här servicehandboken finns bara tillgänglig på engelska.</p> <ul style="list-style-type: none"> • Om en kunds servicetekniker har behov av ett annat språk än engelska ansvarar kunden för att tillhandahålla översättningstjänster. • Försök inte utföra service på utrustningen om du inte har läst och förstår den här servicehandboken. • Om du inte tar hänsyn till den här varningen kan det resultera i skador på serviceteknikern, operatören eller patienten till följd av elektriska stötar, mekaniska faror eller andra faror.
UYARI (TR)	<p>Bu servis kılavuzunun sadece İngilizcesi mevcuttur.</p> <ul style="list-style-type: none"> • Eğer müşteri teknisyeni bu kılavuzu İngilizce dışında bir başka lisandan talep ederse, bunu tercüme ettirmek müşteriye düşer. • Servis kılavuzunu okuyup anlamadan ekipmanlara müdahale etmeyiniz. • Bu uyarıya uyulmaması, elektrik, mekanik veya diğer tehlikelerden dolayı teknisyen, operatör veya hastanın yaralanmasına yol açabilir.

Service Manual Language Information (cont'd.)

<p>ЗАСТЕРЕЖЕННЯ (UK)</p>	<p>Дане керівництво з сервісного обслуговування постачається виключно англійською мовою.</p> <ul style="list-style-type: none"> • Якщо сервісний інженер потребує керівництво іншою мовою, користувач зобов'язаний забезпечити послуги перекладача. • Не намагайтеся здійснювати технічне обслуговування даного обладнання, якщо ви не читали, або не зрозуміли інформацію, надану в керівництві з сервісного обслуговування. • Недотримання цього застереження може призвести до травмування сервісного інженера, користувача даного обладнання або пацієнта внаслідок електричного шоку, механічного ушкодження або з інших причин невірної обслуговування обладнання.
<p>CẢNH BÁO (VI)</p>	<p>Tài Liệu Hướng Dẫn Sửa Chữa chỉ có bản tiếng Anh.</p> <ul style="list-style-type: none"> • Nếu các đơn vị cung cấp dịch vụ cho khách hàng yêu cầu một ngôn ngữ nào khác tiếng Anh, thì khách hàng sẽ có trách nhiệm cung cấp các dịch vụ dịch thuật. • Không được sửa chữa thiết bị trừ khi đã tham khảo và hiểu Tài liệu Hướng dẫn Sửa chữa. • Không tuân thủ những cảnh báo này có thể dẫn đến các tổn thương cho người thực hiện sửa chữa, người vận hành hay bệnh nhân, do sốc điện, các rủi ro về cơ khí hay các rủi ro khác.

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1

Introduction

This chapter provides general information required for the proper use of the system and this manual. Familiarize yourself with this information before using the system.

Manual Information

This section provides information for the correct use of this manual.

Keep this manual with the equipment at all times and periodically review it. You should request training assistance from GE Healthcare, if needed.

Intended Audience

This manual is intended for use by the user who is responsible for backing up and recovering database for the Optima EMS system (also referred to as "the system" throughout this manual).

Manual Purpose

This document provides a detailed description on how to backup and recovery the database of the Optima EMS System.

Document Conventions

This manual uses the following conventions.

Typographical Conventions

Convention	Description
Bold Text	Indicates keys on the keyboard, text to enter, or hardware items such as buttons or switches on the equipment.
<i>Italicized-Bold Text</i>	Indicates software terms that identify menu items, buttons or options in various windows.
CTRL+ESC	Indicates a keyboard operation. A plus (+) sign between the names of two keys indicates that while holding the first key, you should press and release the second key. For example, Press CTRL+ESC means to press and hold the CTRL key and then press and release the ESC key.

Convention	Description
<space>	Indicates that you must press the spacebar. When instructions are given for typing a precise text string with one or more spaces, the point where you must press the spacebar is indicated as <space>. This ensures that the correct number of spaces is inserted in the correct positions within the literal text string. The purpose of the < > brackets is to distinguish the command from the literal text within the string.
Enter	Indicates that you must press the Enter or Return key on the keyboard. Do not type Enter .
>	<p>The greater than symbol, or right angle bracket, is a concise method to indicate a sequence of menu selections.</p> <p>For example, the statement "From the main menu, select System > Setup > Options to open the Option Activation window" replaces the following:</p> <ol style="list-style-type: none"> 1. From the main menu, select System to open the System menu. 2. From the System menu, select Setup to open the Setup menu. 3. From the Setup menu, select Options to open the Option Activation window.

Illustrations

All illustrations in the manual are provided as examples only. Depending on system configuration, screens in the manual may differ from the screens on your system.

All patient names and data are fictitious. Any similarity to actual persons is coincidental.

Notes

Notes provide application tips or additional information that, while useful, are not essential to the correct operation of the system. They are called out from the body text through a flag word and indentation, as follows:

NOTE:

The tip or additional information is indented below the **NOTE** flag word.

Responsibility of the Purchaser/Customer

The customer is responsible for providing appropriate desks, chairs, electrical wall outlets, network connections, analog phone lines, and for locating any of the Optima EMS System components described in this manual in compliance with all local, state or national codes.

Additional Assistance

GE Healthcare maintains a trained staff of application and technical experts to answer questions and respond to issues and problems that may arise during the installation, maintenance, and use of this system.

Contact your local GE Healthcare representative to request additional assistance.

Overview

The Optima EMS system supports two methods for database backup and recovery:

- **Manual**
- **Automatic**

For **Manual** database backup, you may use the following methods:

- **File Copy**
- **SQL Server Management Studio**

NOTE:

Both of these methods may be used in database recovery as well.

For **Automatic** database backup, the **SQL Management Studio** may be used to define the backup policy, frequency, duration and media.

If you only have the **SQL Server Express**, GE Healthcare recommends that the system database is backed up manually.

The recommended media for backups is DVD disk or other similar storage media.

Database Backup

Backing Up the Database Manually

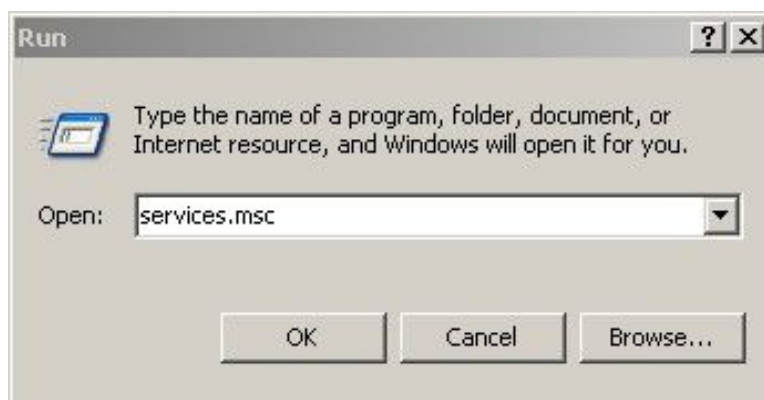
There are two ways to back up database manually:

- **File Copy**
- **SQL Server Management Studio**

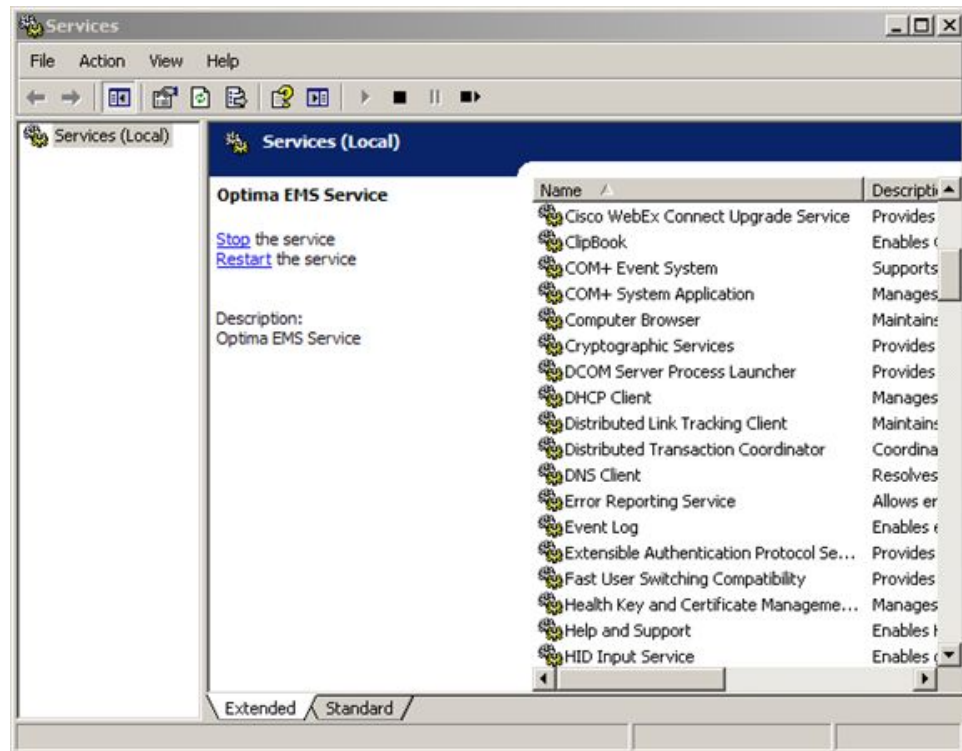
File Copy

Use the following procedure to back up the system database manually through **File Copy**.

1. On the desktop, select **Start > Run**.
The **Run** window opens.
2. Type **services.msc** in the **Open** field.



3. Click **OK**.
The **Services** window opens.



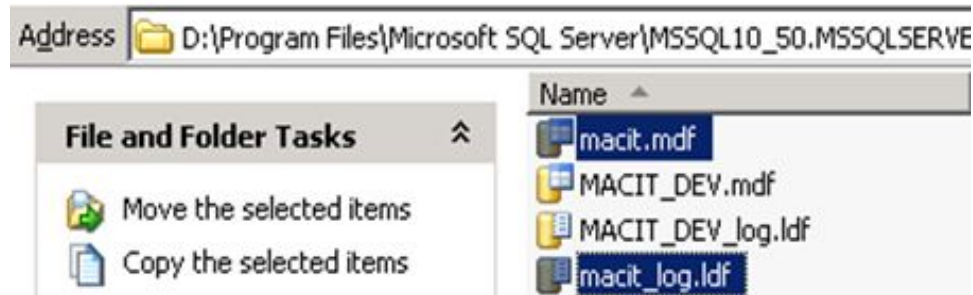
4. In the **Services (Local)** list, right-click **SQL Server (MSSQLSERVER)** and select **Stop**.



The **SQL Server (MSSQLSERVER)** service has stopped.

5. Open **My Computer** and navigate to the SQL Server installation folder.
The SQL Server installation folder is located in **C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA** by default.

6. Select **macit.mdf** and **macit_log.ldf** at the same time.



7. Copy these two files to a database backup folder. For example **D:\DbBackup**.
8. Repeat Steps 1 to 3 to open the **Services** window.
9. In the **Services (Local)** list, right-click **SQL Server (MSSQLSERVER)** and select **Start**.



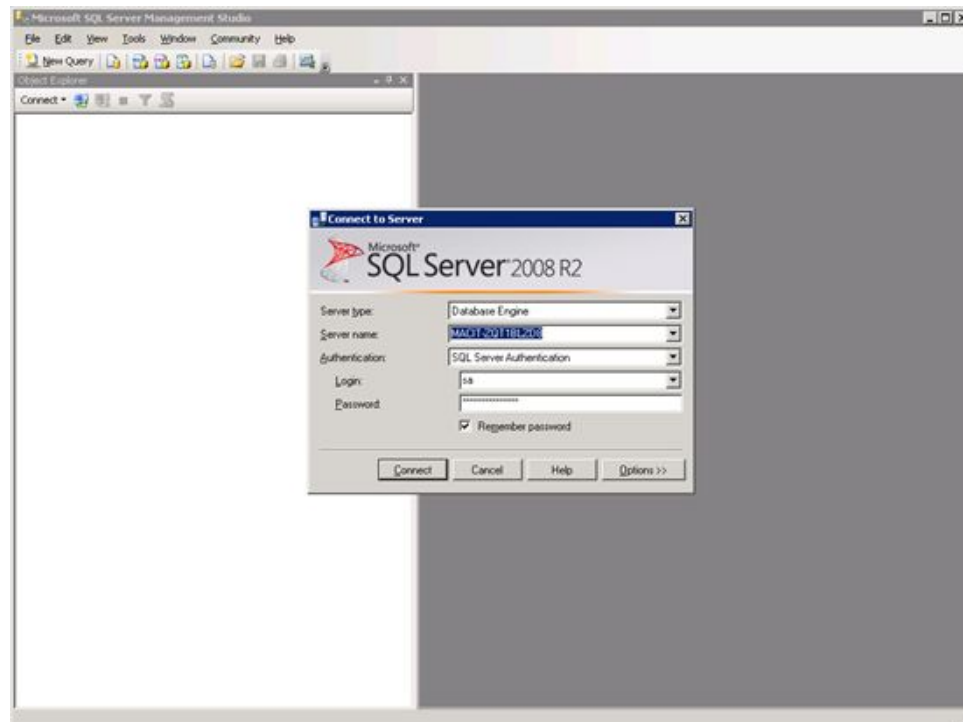
The **SQL Server (MSSQLSERVER)** service starts and the manual backup is completed.

SQL Server Management Studio

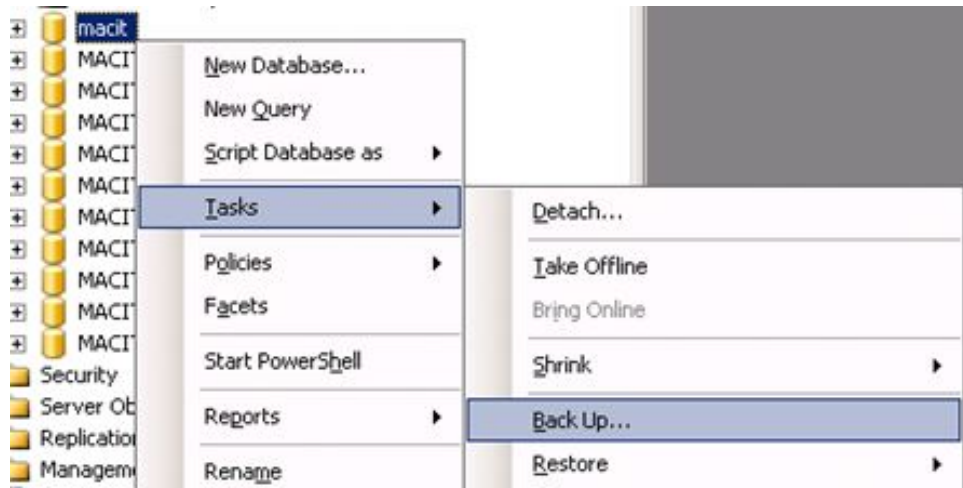
Use the following procedure to back up the system database manually through **SQL Server Management Studio**.

1. On the desktop, select **Start > All Programs > Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.
2. Click **SQL Server Management Studio** to open it.
The **Connect to Server** window opens.

3. Log on to the SQL Server 2008 R2.
You must enter your password while logging on.

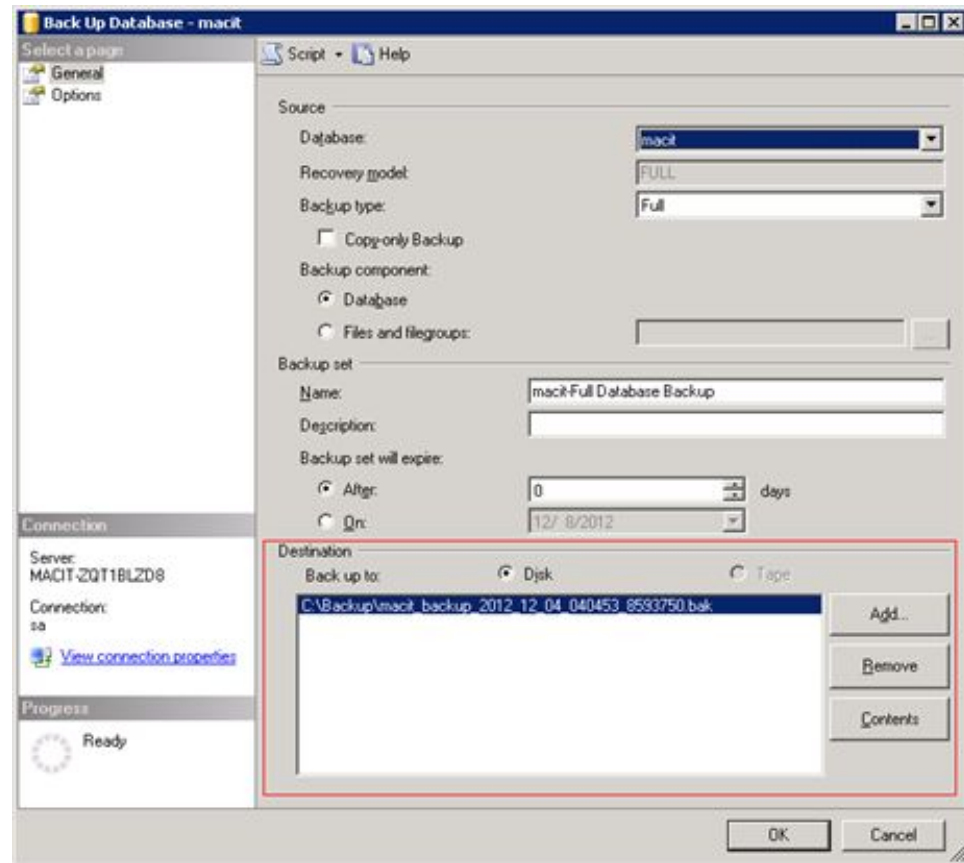


4. Click **Connect**.
5. Expand the **Database** by clicking the + icon.
6. Right-click on **macit** and select **Tasks > Back Up...**



The **Backup Database - macit** window opens.

7. Click **Add** to specify the backup destination.



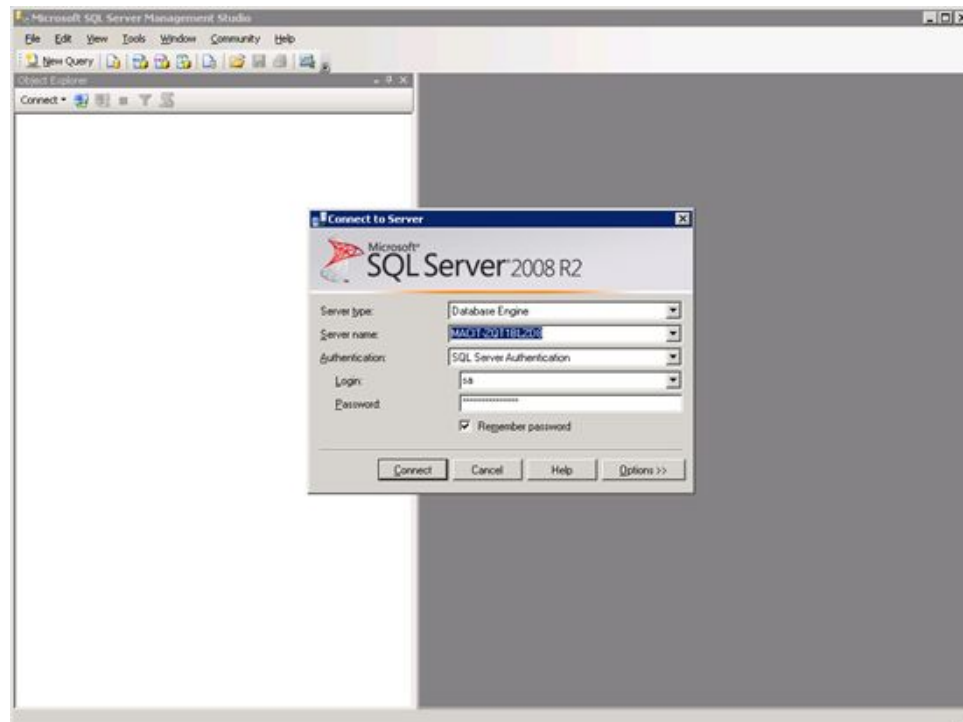
8. Click **OK** to complete the backup.

Backing Up the Database Automatically

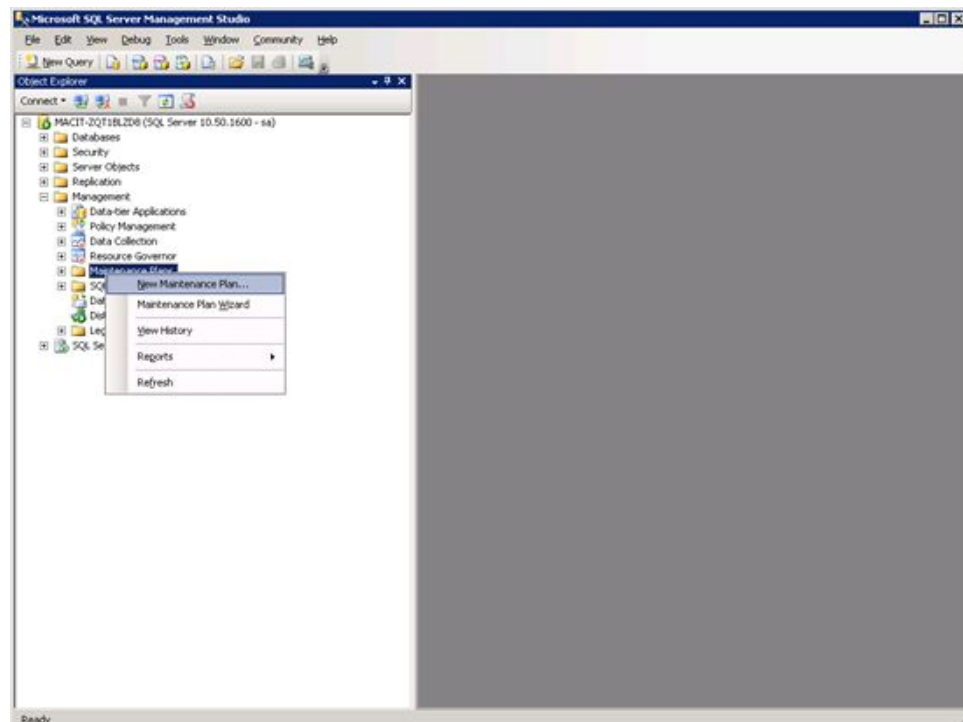
Use the following procedure to back up the system database automatically using the **Maintenance Plans** in **SQL Server Management Studio 2008**.

1. On the desktop, select **Start > All Programs > Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.
2. Click **SQL Server Management Studio** to open it.
The **Connect to Server** window opens.

3. Log on to the SQL Server 2008 R2.
You must enter your password while logging on.

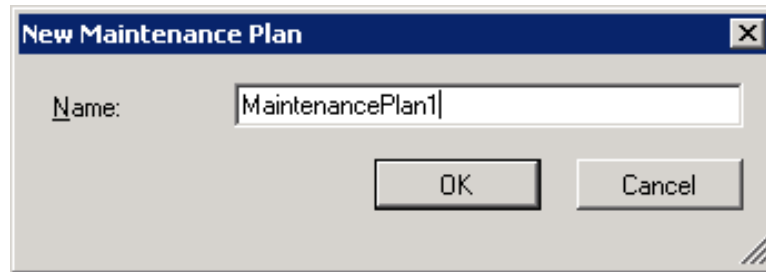


4. Click **Connect**.
5. Click **+** to expand the **Management** folder.
6. Right-click **Maintenance Plans** and select **New Maintenance Plan...**

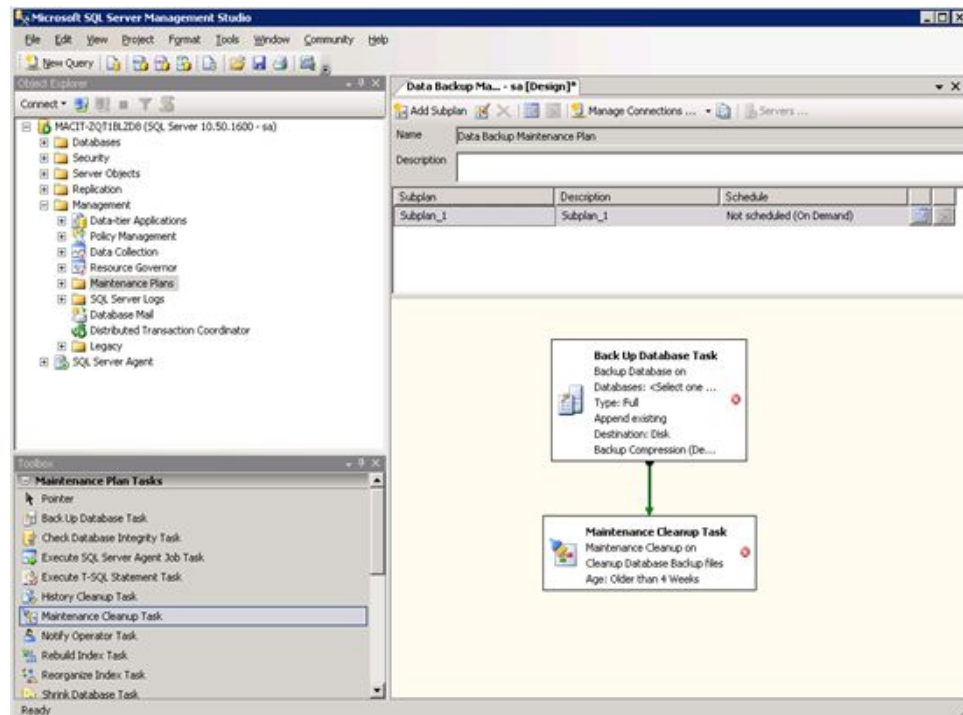


The **New Maintenance Plan** naming window opens.

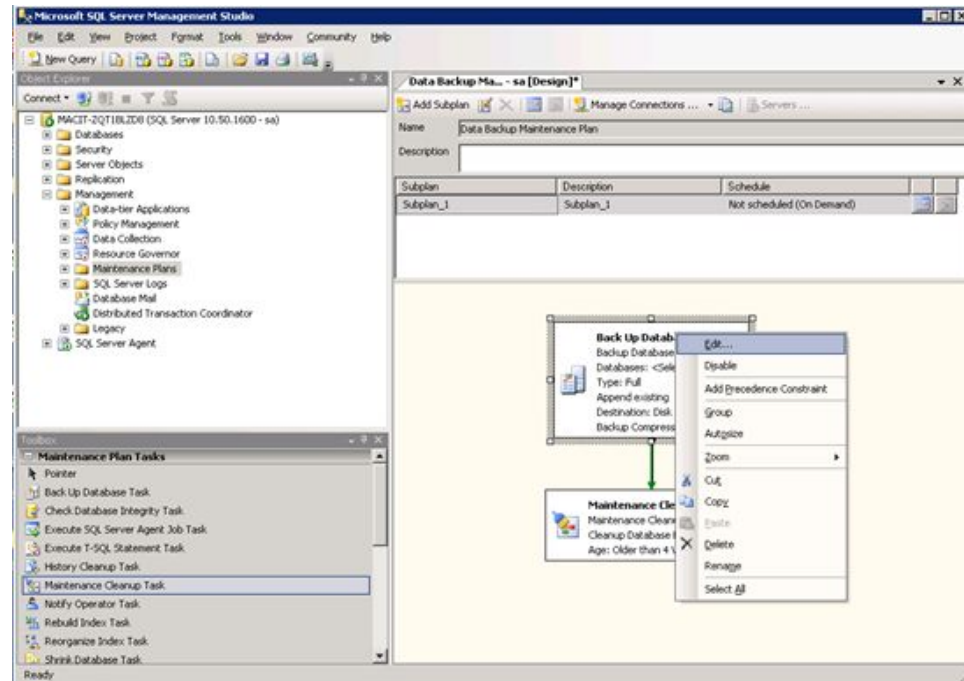
7. Type the maintenance plan name and click **OK**.



8. From **Maintenance Plan Tasks** panel, drag **Back Up Database Task** and **Maintenance Cleanup Task** to the **Data Backup Maintenance Plan - [Design]** panel to indicate the task execution order.



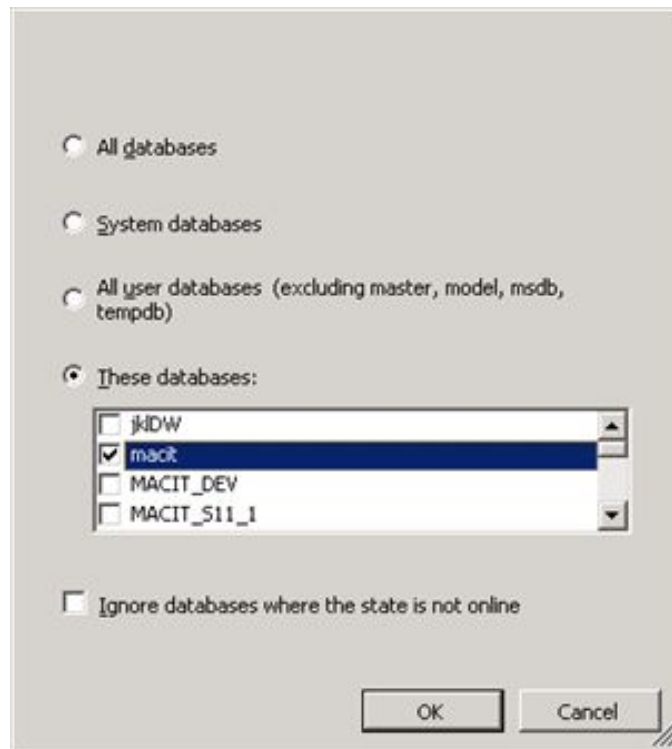
9. Right-click **Back Up Database Task** and select **Edit**.



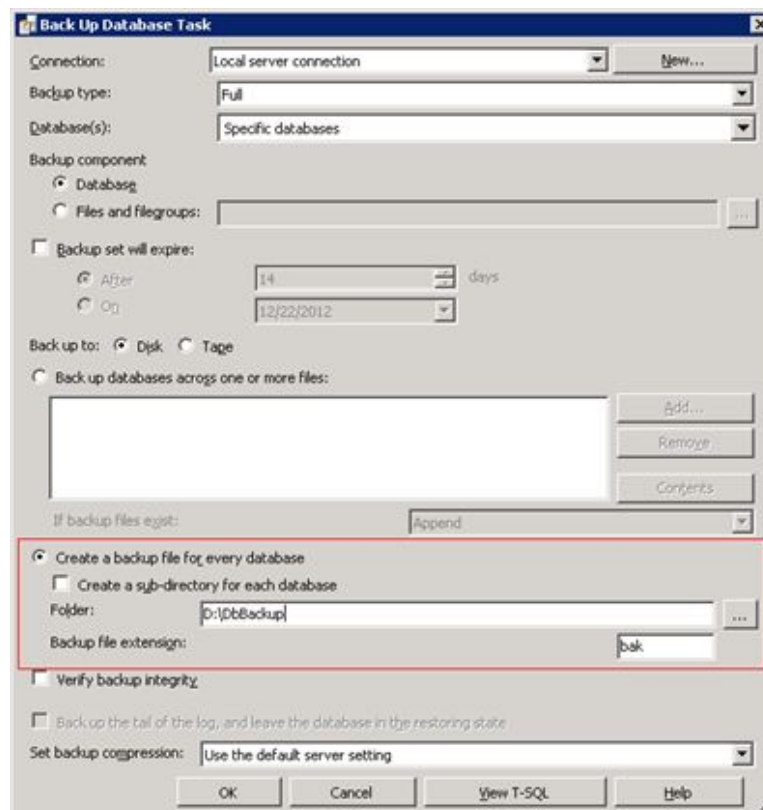
The **Back Up Database Task** window opens.

10. In **Databases(s)**, select **Specific databases**.
The **specify databases** window opens.

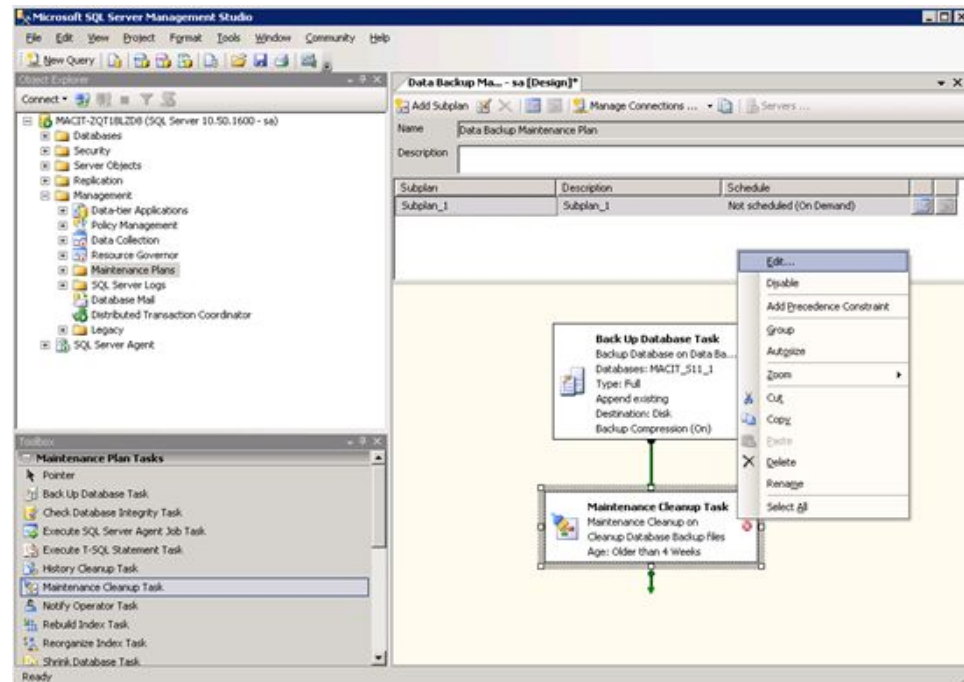
11. Make sure **These databases** is selected. Select **macit** and click **OK**.



12. In the **Create a backup file for every database**, in the **Folder** box, enter the location where you want the backup written.



13. Click **OK** to complete the backup database task configuration
14. Right-click **Back Up Database Task** in **Data Backup Maintenance Plan - [Design]** panel and select **Edit**.



The **Maintenance Cleanup Task** window opens.



15. In the **Search folder and delete files based on an extension**, next to the **Folder** box, click the
16. Select the **data backup** folder.

17. Type the **File extension** and set the **File age** as shown:

Maintenance Cleanup Task

Connection: Local server connection New...

Delete files of the following type:

- ☒ Backup files
- ☐ Maintenance Plan text reports

File location:

- ☐ Delete specific file

File name:

☒ Search folder and delete files based on an extension

Folder: D:\DbBackup ...

File extension: bak

☐ Include first-level subfolders

File age:

☒ Delete files based on the age of the file at task run time

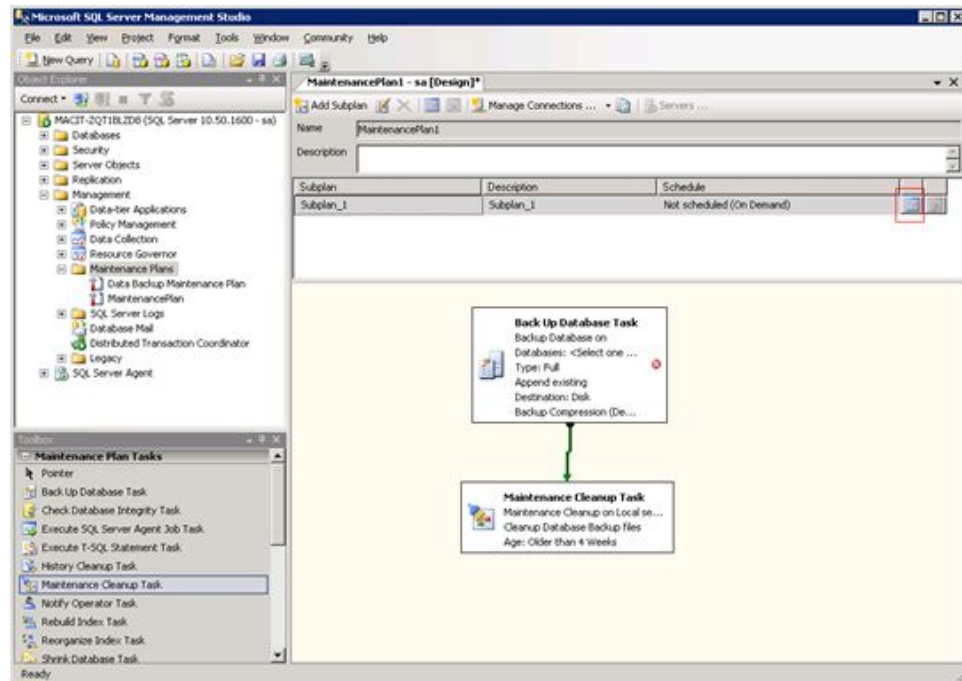
Delete files older than the following:

4 Week(s)

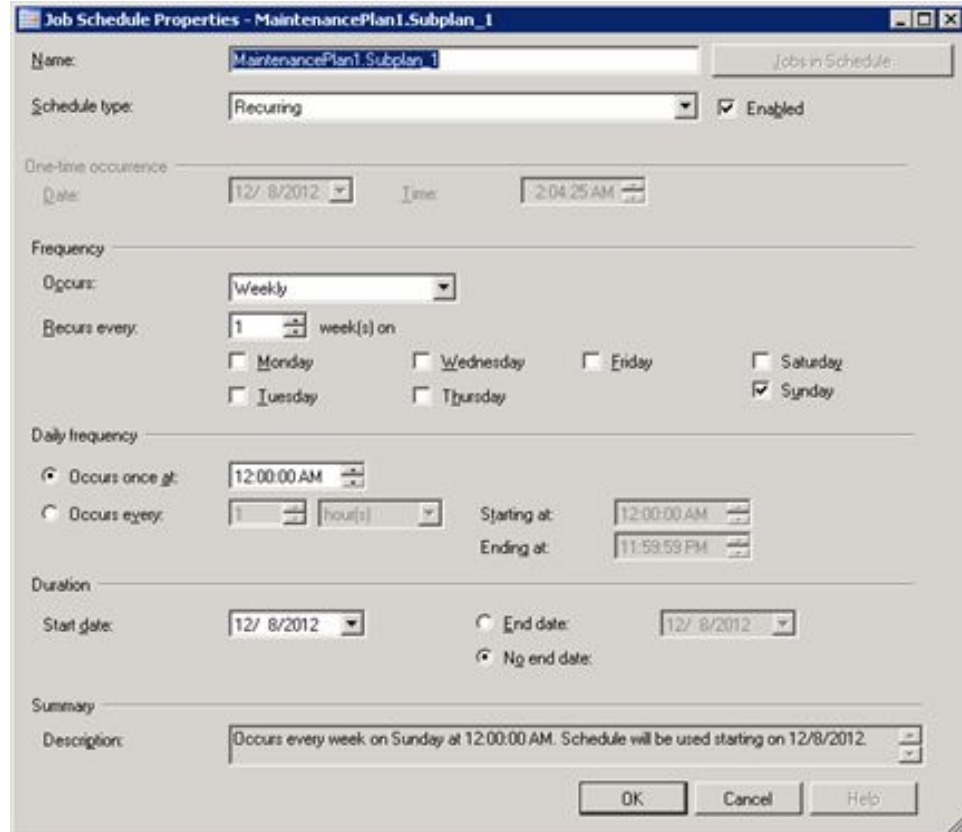
OK Cancel View T-SQL Help

18. Click **OK** to complete **Maintenance Cleanup Task** configuration.

19. In the **Data Backup Maintenance Plan [Design]** panel, click the **Calendar** icon.



The **Job Schedule Properties** window opens.



20. Enter the **Name**, **Frequency**, **Daily frequency**, and **Duration** information to define the automatic backup.

The following is an example for your reference only:

- **Name:** Daily Backup
- **Frequency:** Daily
- **Daily Frequency:** Occurs once at 12:00 am
- **Duration:** Start date and no end date

Job Schedule Properties - MaintenancePlan1.Subplan_1

Name: [Jobs in Schedule](#)

Schedule type: ☒ Enabled

One-time occurrence

Date: Time:

Frequency

Occurs:

Request every: day(s)

Daily frequency

☒ Occurs once at:

☐ Occurs every: hour(s)

Starting at:

Ending at:

Duration

Start date: ☐ End date:

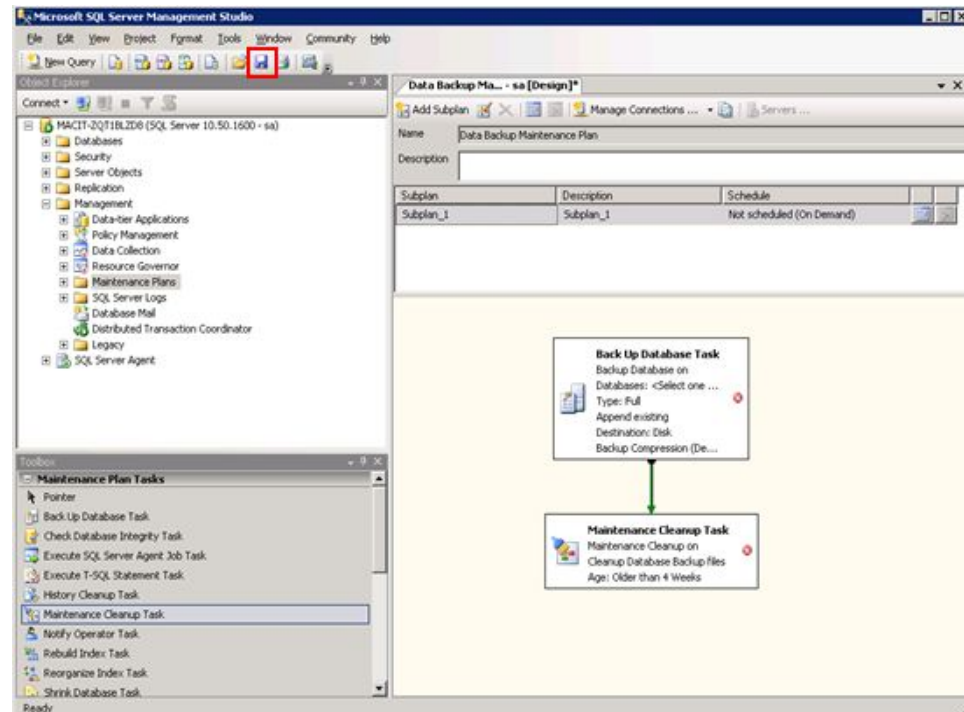
☒ No end date

Summary

Description:

OK Cancel Help

21. Click **OK** to complete the **Job Schedule Properties** configuration.
22. In the **New Maintenance Plan** window, click the **Save** icon to complete the automatic backup configuration.



Database Recovery

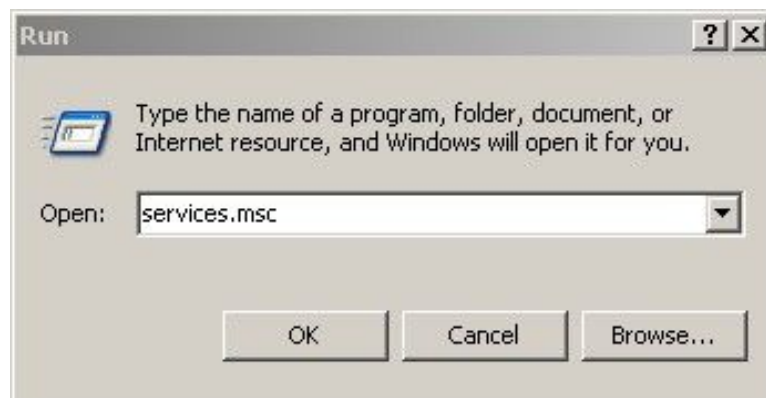
There are two methods to manually recover the database:

- **File Copy**
- **SQL Server Management Studio**

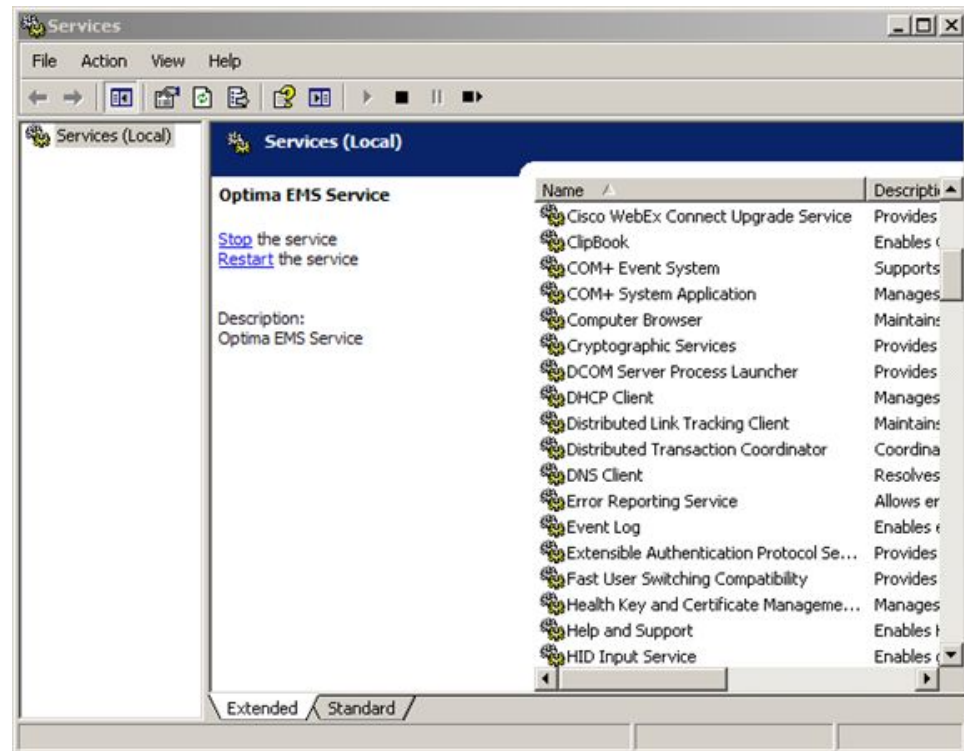
File Copy

Use the following procedure to manually recover the system database using **File Copy**.

1. On the desktop, select **Start > Run**.
The **Run** window opens.
2. Type **services.msc** in the **Open** field.



3. Click **OK**.
The **Services** window opens.



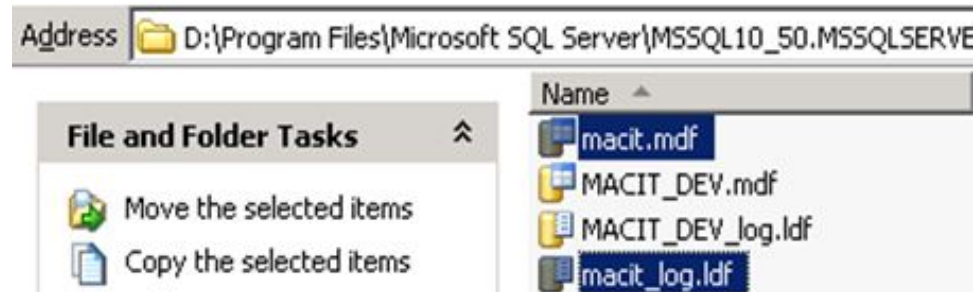
4. In the **Services (Local)** list, right-click **SQL Server (MSSQLSERVER)** and select **Stop**.



The **SQL Server (MSSQLSERVER)** service has stopped.

5. Copy the **macit.mdf** and **macit_log.ldf** files from the database backup folder, and paste them to the SQL Server installation folder

The SQL Server installation folder is located in **C:\Program Files\Microsoft SQL Server\MSSQL10_50.MSSQLSERVER\MSSQL\DATA** by default.



6. Repeat Steps 1 to 3 to open the **Services** window.
7. In the **Services (Local)** list, right-click **SQL Server (MSSQLSERVER)** and select **Start**.



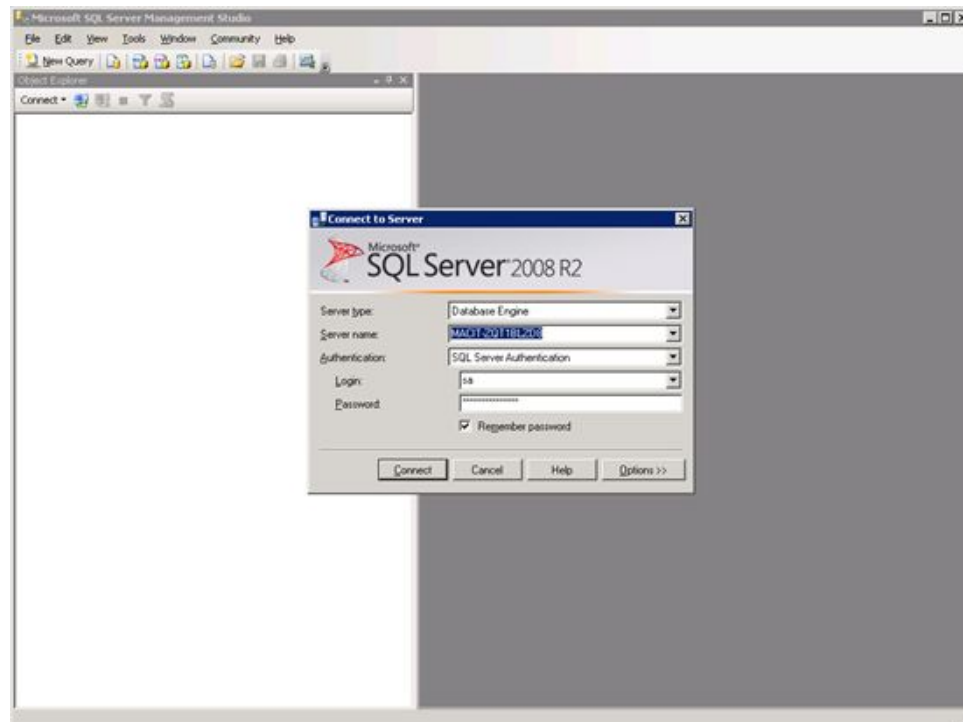
The **SQL Server (MSSQLSERVER)** service starts and the manual database recovery is completed.

SQL Server Management Studio

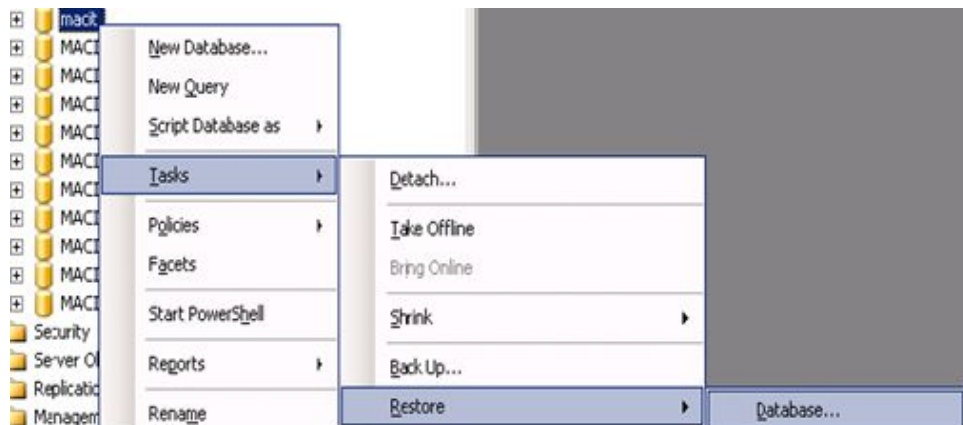
Use the following procedure to manually recover the system database using **SQL Server Management Studio**.

1. On the desktop, select **Start > All Programs > Microsoft SQL Server 2008 R2 > SQL Server Management Studio**.
2. Click **SQL Server Management Studio** to open it.
The **Connect to Server** window opens.

- Log on to the SQL Server 2008 R2.
You must enter your password while logging on.

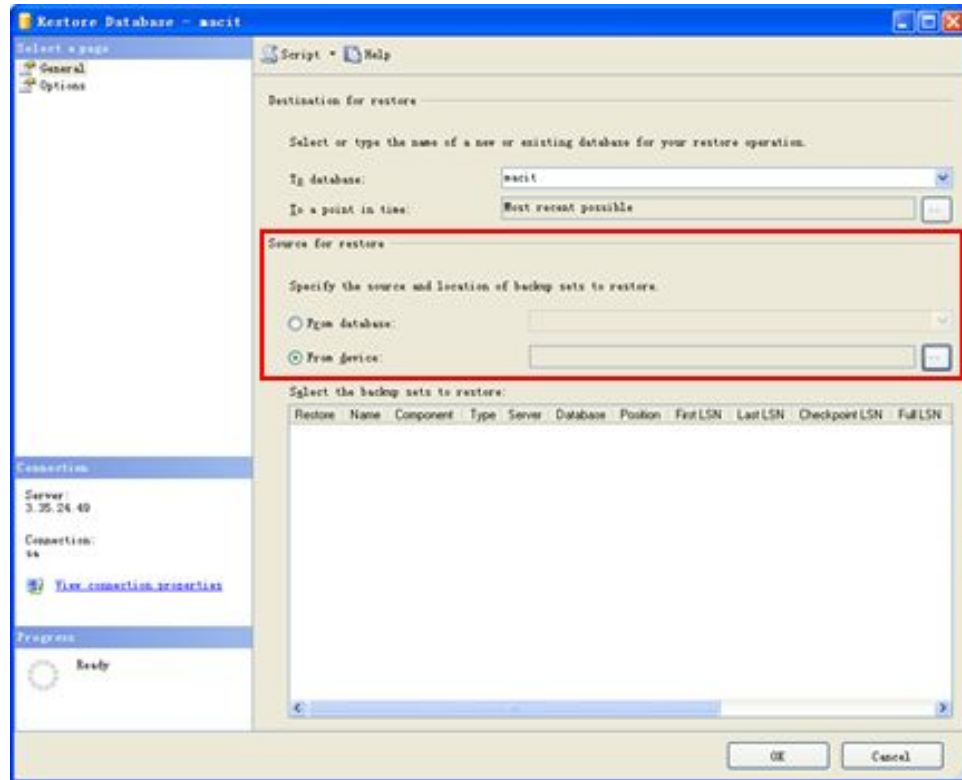


- Click **Connect**.
- Expand the **Database** by clicking the + icon.
- Right-click **macit** and select **Tasks > Restore > Database....**



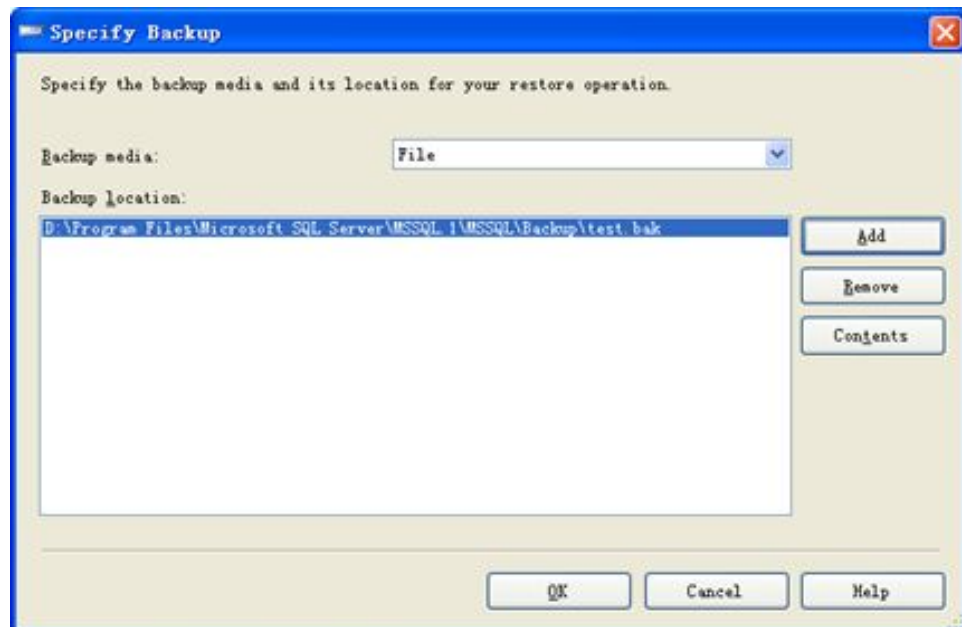
The **Restore Database - macit** window opens.

7. In **Service for restore**, from device click the



The **Specify Backup** window opens.

8. Click Add to select the path of backup file, and click **OK** to save.



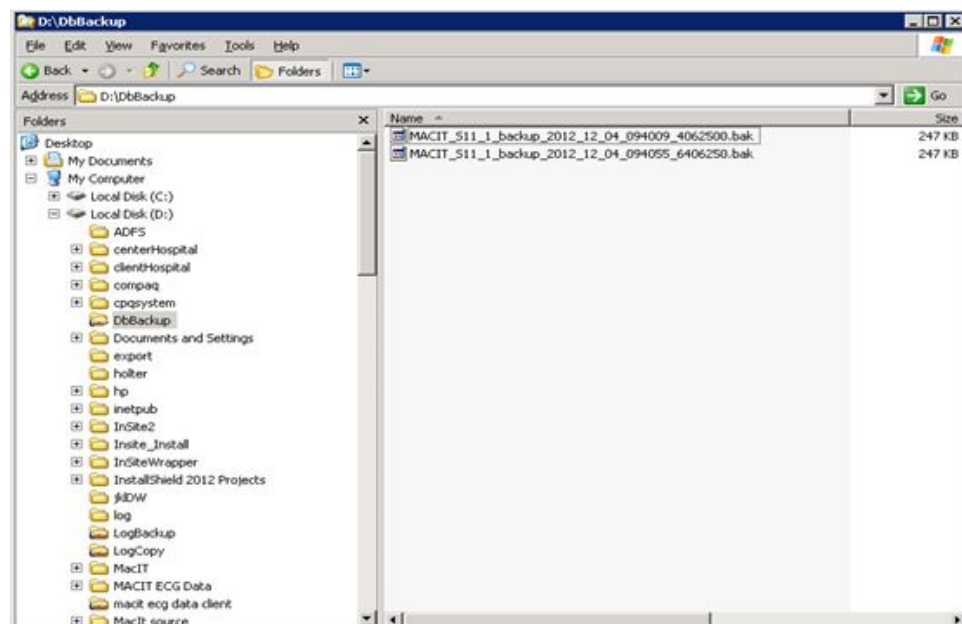
9. In the **Restore Database -macit** window, click **OK** to complete the database recovery.

4

Verifying Backup and Recovery

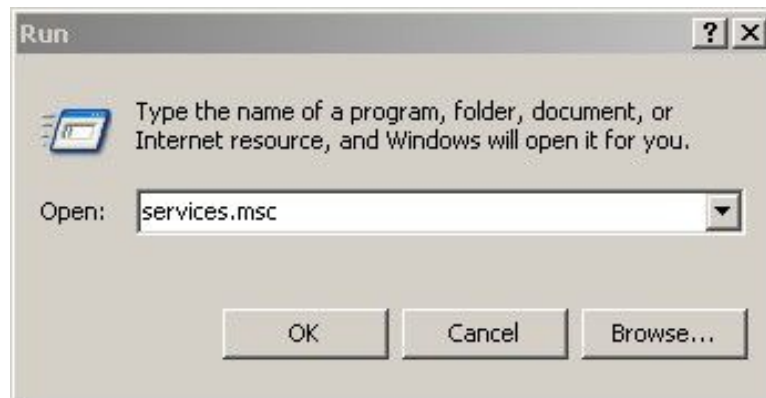
Verifying Database Backup

1. Open My Computer and navigate to the backup folder. For example, **D:\DbBackup**.
2. Check whether the database backup file exists.

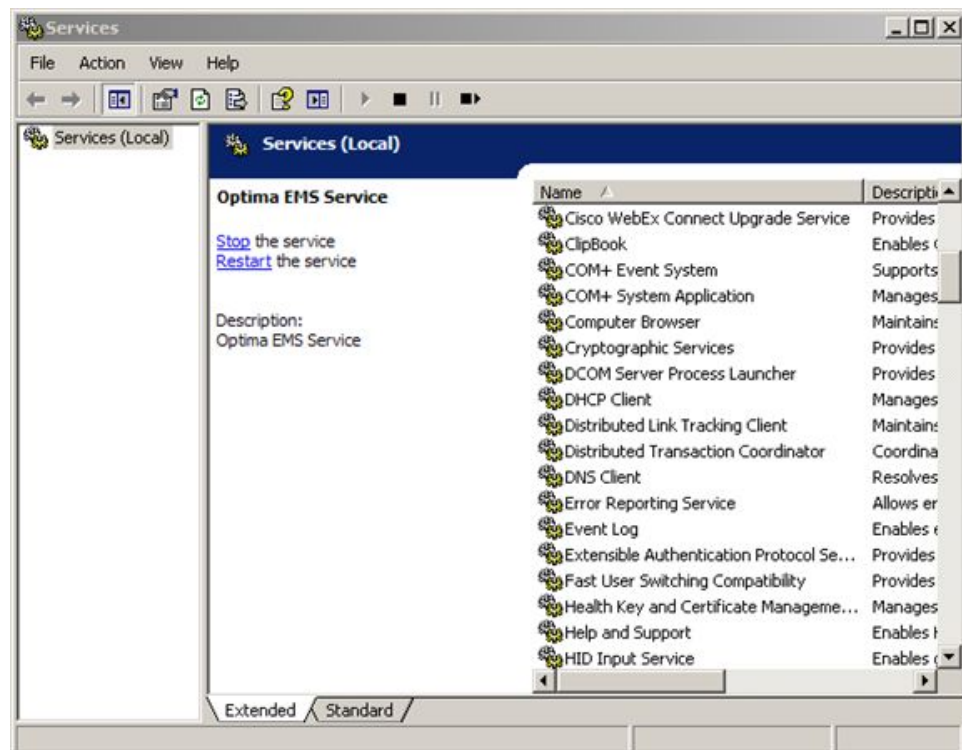


Verifying Database Recovery

1. On the desktop, select **Start > Run**.
The **Run** window opens.
2. Type **services.msc** in the **Open** field.



3. Click **OK**.
The **Services** window opens.



4. Find **SQL Server (MSSQLSERVER)** and **Optima EMS Service** in the **Service (Local)** list, and check whether the status of these two services is **Started**.
If the status is not **Started**, right-click on the item and select **Start**.

Name	Description	Status	Startup Type	Log On As
Security Accounts Manager	The startup of this ser...	Started	Automatic	Local System
Server	Supports file, print, an...	Started	Automatic	Local System
Shell Hardware Detection	Provides notifications f...	Started	Automatic	Local System
Smart Card	Manages access to sm...		Manual	Local Service
Special Administration Console...	Allows administrators t...		Manual	Local System
SQL Active Directory Helper S...	Enables integration wit...		Disabled	Network S...
SQL Server (MSSQLSERVER)	Provides storage, proc...	Started	Automatic	Local System
SQL Server Agent (MSSQLSER...	Executes jobs, monitor...	Started	Automatic	Network S...
SQL Server Browser	Provides SQL Server co...		Disabled	Local Service
SQL Server VSS Writer	Provides the interface ...	Started	Automatic	Local System
System Event Notification	Monitors system event...	Started	Automatic	Local System
Task Scheduler	Enables a user to confi...	Started	Automatic	Local System
TCP/IP NetBIOS Helper	Provides support for th...	Started	Automatic	Local Service
Telephony	Provides Telephony AP...	Started	Manual	Local System
Telnet	Enables a remote user ...		Manual	Local Service
Terminal Services	Allows users to connec...	Started	Manual	Local System
Terminal Services Session Dire...	Enables a user connect...		Disabled	Local System
Themes	Provides user experien...		Disabled	Local System
TightVNC Server			Manual	Local System
Uninterruptible Power Supply	Manages an uninterrup...		Manual	Local Service
Virtual Disk Service	Provides software volu...		Manual	Local System
Visual Studio 2008 Remote De...	Allows members of the ...		Disabled	Local System
VisualSVN Server	VisualSVN Server	Started	Automatic	Network S...

Name	Description	Status	Startup Type	Log On As
Net Logon	Maintains a secure cha...		Manual	Local System
Net.Tcp Port Sharing Service	Provides ability to shar...		Manual	Local Service
NetMeeting Remote Desktop S...	Enables an authorized ...		Manual	Local System
Network Connections	Manages objects in the...	Started	Manual	Local System
Network DDE	Provides network trans...		Disabled	Local System
Network DDE DSDM	Manages Dynamic Data...		Disabled	Local System
Network Location Awareness (...)	Collects and stores net...	Started	Manual	Local System
Network Provisioning Service	Manages XML configur...		Manual	Local System
NT LM Security Support Provider	Provides security to re...		Manual	Local System
Optima EMS Service	Optima EMS Service	Started	Automatic	Local System
Performance Logs and Alerts	Collects performance d...		Automatic	Network S...
Plug and Play	Enables a computer to ...	Started	Automatic	Local System
Portable Media Serial Number ...	Retrieves the serial nu...		Manual	Local System
Print Spooler	Manages all local and n...	Started	Automatic	Local System
Protected Storage	Protects storage of se...	Started	Automatic	Local System
QQBrowser Software Updater	QQ浏览器自动升级服务	Started	Automatic	Local System
QUESTRA SERVICE AGENT		Started	Automatic	Local System
Remote Access Auto Connecti...	Creates a connection t...		Manual	Local System
Remote Access Connection Ma...	Creates a network con...	Started	Manual	Local System
Remote Desktop Help Session ...	Manages and controls ...		Manual	Local System

5. Double-click the Optima EMS System icon on the desktop.
Check whether you can log on the system successfully.



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