

GE Healthcare

# MUSE Cardiology Information System

## Devices and Interfaces

Software Version 8.0  
2034539-180 Revision D



MUSE  
English  
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## Publication Information

The Information in this manual applies to MUSE Cardiology Information System Version 8.0. 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 are on each page of the document. The revision identifies the document's update level. The revision history of this document is summarized in the following table.

Revision	Date	Comments
A	17 March 2011	Initial release of this manual.
B	13 April 2011	Updates to resolve SPR 53222 and SPR 66469.
C	29 September 2011	Per SPR HCSDM00095012 three new steps were added to the section Installing MUSE Web and a new section titled: Verify MUSE Web Folder were added to the chapter: MUSE Web (Enterprise Integration) Installation.  Per SPR HCSDM00099385, in the MUSE API Installation and Configuration for VA Vista Imaging Chapter, section: Verifying the Users, step 3, the paragraph referencing the Service Pack 3 (SP3) was removed. This information is no longer valid with Service Pack 4 (SP4).
D	14 June 2016	Updated the CASE to MUSE chapter.

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To access Original Equipment Manufacturer (OEM) documents, go to the device manufacturer's website.

## Service Manual Language Information

WARNING (EN)	<p>This service manual is available in English only.</p> <ul style="list-style-type: none"><li>• If a customer's service provider requires a language other than English, it is the customer's responsibility to provide translation services.</li><li>• Do not attempt to service the equipment unless this service manual has been consulted and is understood.</li><li>• Failure to heed this warning may result in injury to the service provider, operator, or patient, from electric shock, mechanical or other hazards.</li></ul>
ПРЕДУПРЕЖДЕНИЕ (BG)	<p>Това упътване за работа е налично само на английски език.</p> <ul style="list-style-type: none"><li>• Ако доставчикът на услугата на клиента изиска друг език, задължение на клиента е да осигури превод.</li><li>• Не използвайте оборудването, преди да сте се консултирали и разбрали упътването за работа.</li><li>• 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.</li></ul>
警告 (ZH-CN)	<p>本维修手册仅提供英文版本。</p> <ul style="list-style-type: none"><li>• 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。</li><li>• 未详细阅读和完全理解本维修手册之前，不得进行维修。</li><li>• 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。</li></ul>

## Service Manual Language Information (cont'd.)

警告 (ZH-TW)	<p>本維修手冊只提供英文版。</p> <ul style="list-style-type: none"> <li>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。</li> <li>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。</li> <li>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。</li> </ul>
UPOZORENJE (HR)	<p>Ove upute za servisiranje dostupne su samo na engleskom jeziku.</p> <ul style="list-style-type: none"> <li>Ukoliko korisnički servis zahtijeva neki drugi jezik, korisnikova je odgovornost osigurati odgovarajući prijevod.</li> <li>Nemojte pokušavati servisirati opremu ukoliko niste konzultirali i razumjeli ove upute.</li> <li>Nepoštivanje ovog upozorenja može rezultirati ozljedama servisnog osoblja, korisnika ili pacijenta prouzročenim električnim udarom te mehaničkim ili nekim drugim opasnostima.</li> </ul>
VAROVÁNÍ (CS)	<p>Tento provozní návod existuje pouze v anglickém jazyce.</p> <ul style="list-style-type: none"> <li>V případě, že externí služba zákazníkům potřebuje návod v jiném jazyce, je zajištění překladu do odpovídajícího jazyka úkolem zákazníka.</li> <li>Nesnažte se o údržbu tohoto zařízení, aniž byste si přečetli tento provozní návod a pochopili jeho obsah.</li> <li>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.</li> </ul>
ADVARSEL (DA)	<p>Denne servicemanual findes kun på engelsk.</p> <ul style="list-style-type: none"> <li>Hvis en kundes tekniker har brug for et andet sprog end engelsk, er det kundens ansvar at sørge for oversættelse.</li> <li>Forsøg ikke at servicere udstyret medmindre denne servicemanual har været konsulteret og er forstået.</li> <li>Manglende overholdelse af denne advarsel kan medføre skade på grund af elektrisk, mekanisk eller anden fare for teknikeren, operatøren eller patienten.</li> </ul>
WAARSCHUWING (NL)	<p>Deze service manual is alleen in het Engels verkrijgbaar.</p> <ul style="list-style-type: none"> <li>Indien het onderhoudspersoneel een andere taal nodig heeft, dan is de klant verantwoordelijk voor de vertaling ervan.</li> <li>Probeer de apparatuur niet te onderhouden voordat deze service manual geraadpleegd en begrepen is.</li> <li>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.</li> </ul>
HOIATUS (ET)	<p>Käesolev teenindusjuhend on saadaval ainult inglise keeles.</p> <ul style="list-style-type: none"> <li>Kui klienditeeninduse osutaja nõuab juhendit inglise keelest erinevas keeles, vastutab klient tõlketeenuse osutamise eest.</li> <li>Ärge üritage seadmeid teenindada enne eelnevalt käesoleva teenindusjuhendiga tutvumist ja sellest aru saamist.</li> <li>Käesoleva hoiatuse eiramine võib põhjustada teenuseosutaja, operaatori või patsiendi vigastamist elektrilöögi, mehaanilise või muu ohu tagajärjel.</li> </ul>

## Service Manual Language Information (cont'd.)

VAROITUS (FI)	<p>Tämä huolto-ohje on saatavilla vain englanniksi.</p> <ul style="list-style-type: none"> <li>Jos asiakkaan huoltohenkilöstö vaatii muuta kuin englanninkielistä materiaalia, tarvittavan käännöksen hankkiminen on asiakkaan vastuulla.</li> <li>Älä yritä korjata laitteistoa ennen kuin olet varmasti lukenut ja ymmärtänyt tämän huolto-ohjeen.</li> <li>Mikäli tätä varoitusta ei noudateta, seurauksena voi olla huoltohenkilöstön, laitteiston käyttäjän tai potilaan vahingoittuminen sähköiskun, mekaanisen vian tai muun vaaratilanteen vuoksi.</li> </ul>
ATTENTION (FR)	<p>Ce manuel technique n'est disponible qu'en anglais.</p> <ul style="list-style-type: none"> <li>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.</li> <li>Ne pas tenter d'intervenir sur les équipements tant que le manuel technique n'a pas été consulté et compris.</li> <li>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.</li> </ul>
WARNUNG (DE)	<p>Diese Serviceanleitung ist nur in englischer Sprache verfügbar.</p> <ul style="list-style-type: none"> <li>Falls der Kundendienst eine andere Sprache benötigt, muss er für eine entsprechende Übersetzung sorgen.</li> <li>Keine Wartung durchführen, ohne diese Serviceanleitung gelesen und verstanden zu haben.</li> <li>Bei Zuwiderhandlung kann es zu Verletzungen des Kundendiensttechnikers, des Anwenders oder des Patienten durch Stromschläge, mechanische oder sonstige Gefahren kommen.</li> </ul>
ΠΡΟΕΙΔΟΠΟΙΗΣΗ (EL)	<p>Το παρόν εγχειρίδιο σέρβις διατίθεται στα αγγλικά μόνο.</p> <ul style="list-style-type: none"> <li>Εάν το άτομο παροχής σέρβις ενός πελάτη απαιτεί το παρόν εγχειρίδιο σε γλώσσα εκτός των αγγλικών, αποτελεί ευθύνη του πελάτη να παρέχει υπηρεσίες μετάφρασης.</li> <li>Μην επιχειρήσετε την εκτέλεση εργασιών σέρβις στον εξοπλισμό εκτός εάν έχετε συμβουλευτεί και έχετε κατανοήσει το παρόν εγχειρίδιο σέρβις.</li> <li>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.</li> </ul>
FIGYELMEZTETÉS (HU)	<p>Ez a szerviz kézikönyv kizárólag angol nyelven érhető el.</p> <ul style="list-style-type: none"> <li>Ha a vevő szerviz ellátója angoltól eltérő nyelvre tart igényt, akkor a vevő felelőssége a fordítás elkészítése.</li> <li>Ne próbálja elkezdni használni a berendezést, amíg a szerviz kézikönyvben leírtakat nem értelmezték és értették meg.</li> <li>Ezen figyelmeztetés figyelmen kívül hagyása a szerviz ellátó, a működtető vagy a páciens áramütés, mechanikai vagy egyéb veszélyhelyzet miatti sérülését eredményezheti.</li> </ul>
ADVÖRUN (IS)	<p>Þessi þjónustuhandbók er eingöngu fánleg á ensku.</p> <ul style="list-style-type: none"> <li>Ef að þjónustuveitandi viðskiptamanns þarfnast annars tungumáls en ensku, er það skylda viðskiptamanns að skaffa tungumálþjónustu.</li> <li>Reynið ekki að afgreiða tækið nema þessi þjónustuhandbók hefur verið skoðuð og skilin.</li> <li>Brot á að sinna þessari advörun getur leitt til meiðsla á þjónustuveitanda, stjórnaða eða sjúklingi frá raflösti, vélrænum eða öðrum áhættum.</li> </ul>

## Service Manual Language Information (cont'd.)

PERINGATAN (ID)	<p>Manual servis ini hanya tersedia dalam bahasa Inggris.</p> <ul style="list-style-type: none"> <li>• Jika penyedia jasa servis pelanggan memerlukan bahasa lain selain dari Bahasa Inggris, merupakan tanggung jawab dari penyedia jasa servis tersebut untuk menyediakan terjemahannya.</li> <li>• Jangan mencoba melakukan servis terhadap perlengkapan kecuali telah membaca dan memahami manual servis ini.</li> <li>• Mengabaikan peringatan ini bisa mengakibatkan cedera pada penyedia servis, operator, atau pasien, karena terkena kejut listrik, bahaya mekanis atau bahaya lainnya.</li> </ul>
AVVERTENZA (IT)	<p>Il presente manuale di manutenzione è disponibile soltanto in Inglese.</p> <ul style="list-style-type: none"> <li>• Se un addetto alla manutenzione richiede il manuale in una lingua diversa, il cliente è tenuto a provvedere direttamente alla traduzione.</li> <li>• Si proceda alla manutenzione dell'apparecchiatura solo dopo aver consultato il presente manuale ed averne compreso il contenuto.</li> <li>• 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.</li> </ul>
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"> <li>• 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。</li> <li>• 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。</li> <li>• 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。</li> </ul>
경고 (KO)	<p>본 서비스 지침서는 영어로만 이용하실 수 있습니다.</p> <ul style="list-style-type: none"> <li>• 고객의 서비스 제공자가 영어 이외의 언어를 요구할 경우, 번역 서비스를 제공하는 것은 고객의 책임입니다.</li> <li>• 본 서비스 지침서를 참고했고 이해하지 않는 한은 해당 장비를 수리하려고 시도하지 마십시오.</li> <li>• 이 경고에 유의하지 않으면 전기 쇼크, 기계상의 혹은 다른 위험으로부터 서비스 제공자, 운영자 혹은 환자에게 위험을 가할 수 있습니다.</li> </ul>
ЕСКЕРТУ (KK)	<p>Бұл қызмет көрсету бойынша нұсқаулығы тек ағылшын тілінде қолжетімді.</p> <ul style="list-style-type: none"> <li>• Тұтынушының қызмет провайдері ағылшын тілінен басқа тілдегі нұсқаны талап етсе, аудару бойынша қызметтерімен қамтамасыз ету тұтынушы жауапкершілігінде болуы тиіс.</li> <li>• Бұл қызмет көрсету бойынша нұсқаулығын назарға алып, түсінбегенше, жабдыққа қызмет көрсетуден бас тартыңыз.</li> <li>• Бұл ескертуді елемей қызмет провайдері, оператор немесе емделушінің электр шоғынан, механикалық немесе басқа қауіптер нәтижесінде жарақат алуына әкелуі мүмкін.</li> </ul>

## Service Manual Language Information (cont'd.)

BRĪDINĀJUMS (LV)	<p>Šī apkalpotāju rokasgrāmata ir pieejama tikai angļu valodā.</p> <ul style="list-style-type: none"> <li>Ja apkalpošanas sniedzējam nepieciešama informācija citā, nevis angļu, valodā, klienta pienākums ir nodrošināt tās tulkošanu.</li> <li>Neveiciet aprīkojuma apkopi, neizlasot un nesaprotot apkalpotāju rokasgrāmatu.</li> <li>Šī brīdinājuma neievērošana var radīt elektriskās strāvas trieciena, mehānisku vai citu risku izraisītu traumu apkopes sniedzējam, operatoram vai pacientam.</li> </ul>
ISPĖJIMAS (LT)	<p>Šis eksploatavimo vadovas yra prieinamas tik anglų kalba.</p> <ul style="list-style-type: none"> <li>Jei kliento paslaugų tiekėjas reikalauja vadovo kita kalba - ne anglų, numatyti vertimo paslaugas yra kliento atsakomybė.</li> <li>Nemėginkite atlikti įrangos techninės priežiūros, nebent atsižvelgėte į šį eksploatavimo vadovą ir jį supratote.</li> <li>Jei neatkreipsite dėmesio į šį perspėjimą, galimi sužalojimai dėl elektros šoko, mechaninių ar kitų paslaugų tiekėjui, operatoriui ar pacientui.</li> </ul>
ADVASEL (NO)	<p>Denne servicehåndboken finnes bare på engelsk.</p> <ul style="list-style-type: none"> <li>Hvis kundens serviceleverandør trenger et annet språk, er det kundens ansvar å sørge for oversettelse.</li> <li>Ikke forsøk å reparere utstyret uten at denne servicehåndboken er lest og forstått.</li> <li>Manglende hensyn til denne advarselen kan føre til at serviceleverandøren, operatøren eller pasienten skades på grunn av elektrisk støt, mekaniske eller andre farer.</li> </ul>
OSTRZEŻENIE (PL)	<p>Niniejszy podręcznik serwisowy dostępny jest jedynie w języku angielskim.</p> <ul style="list-style-type: none"> <li>Jeśli dostawca usług klienta wymaga języka innego niż angielski, zapewnienie usługi tłumaczenia jest obowiązkiem klienta.</li> <li>Nie należy serwisować wyposażenia bez zapoznania się i zrozumienia niniejszego podręcznika serwisowego.</li> <li>Niezastosowanie się do tego ostrzeżenia może spowodować urazy dostawcy usług, operatora lub pacjenta w wyniku porażenia elektrycznego, zagrożenia mechanicznego bądź innego.</li> </ul>
AVISO (PT-BR)	<p>Este manual de assistência técnica só se encontra disponível em inglês.</p> <ul style="list-style-type: none"> <li>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.</li> <li>Não tente reparar o equipamento sem ter consultado e compreendido este manual de assistência técnica.</li> <li>O não cumprimento deste aviso pode por em perigo a segurança do técnico, operador ou paciente devido a choques elétricos, mecânicos ou outros.</li> </ul>
AVISO (PT-PT)	<p>Este manual técnico só se encontra disponível em inglês.</p> <ul style="list-style-type: none"> <li>Se a assistência técnica do cliente solicitar estes manuais noutra idioma, é da responsabilidade do cliente fornecer os serviços de tradução.</li> <li>Não tente reparar o equipamento sem ter consultado e compreendido este manual técnico.</li> <li>O não cumprimento deste aviso pode provocar lesões ao técnico, ao utilizador ou ao paciente devido a choques eléctricos, mecânicos ou outros.</li> </ul>

## Service Manual Language Information (cont'd.)

AVERTISMENT (RO)	<p>Acest manual de service este disponibil numai în limba engleză.</p> <ul style="list-style-type: none"> <li>• Dacă un furnizor de servicii pentru clienți necesită o altă limbă decât cea engleză, este de datoria clientului să furnizeze o traducere.</li> <li>• Nu încercați să reparați echipamentul decât ulterior consultării și înțelegerii acestui manual de service.</li> <li>• Ignorarea acestui avertisment ar putea duce la rănirea depanatorului, operatorului sau pacientului în urma pericolelor de electrocutare, mecanice sau de altă natură.</li> </ul>
ПРЕДУПРЕЖДЕНИЕ (RU)	<p>Настоящее руководство по обслуживанию предлагается только на английском языке.</p> <ul style="list-style-type: none"> <li>• Если сервисному персоналу клиента необходимо руководство не на английском, а на каком-то другом языке, клиенту следует обеспечить перевод самостоятельно.</li> <li>• Прежде чем приступать к обслуживанию оборудования, обязательно обратитесь к настоящему руководству и внимательно изучите изложенные в нем сведения.</li> <li>• Несоблюдение требований данного предупреждения может привести к тому, что специалисты по обслуживанию, операторы или пациенты получат удар электрическим током, механическую травму или другое повреждение.</li> </ul>
UPOZORENJE (SR)	<p>Ovo servisno uputstvo je dostupno samo na engleskom jeziku.</p> <ul style="list-style-type: none"> <li>• Ako klijentov serviser zahteva neki drugi jezik, klijent je dužan da obezbedi prevodilačke usluge.</li> <li>• Ne pokušavajte da opravite uređaj ako niste pročitali i razumeli ovo servisno uputstvo.</li> <li>• Zanemarivanje ovog upozorenja može dovesti do povređivanja serviser, rukovaoca ili pacijenta usled strujnog udara, ili mehaničkih i drugih opasnosti.</li> </ul>
VAROVANIE (SK)	<p>Tento návod na obsluhu je k dispozícii len v angličtine.</p> <ul style="list-style-type: none"> <li>• Ak zákazníkovi poskytovateľ služieb vyžaduje iný jazyk ako angličtinu, poskytnutie prekladateľských služieb je zodpovednosťou zákazníka.</li> <li>• Nepokúšajte sa o obsluhu zariadenia sôr, ako si neprečítate návod na obsluhu a neporozumiete mu.</li> <li>• Zanedbanie tohto varovania môže vyústiť do zranenia poskytovateľa služieb, obsluhujúcej osoby alebo pacienta elektrickým prúdom, mechanickým alebo iným nebezpečenstvom.</li> </ul>
OPOZORILO (SL)	<p>Ta servisni priročnik je na voljo samo v angleškem jeziku.</p> <ul style="list-style-type: none"> <li>• Če ponudnik storitve stranke potrebuje priročnik v drugem jeziku, mora stranka zagotoviti prevod.</li> <li>• Ne poskušajte servisirati opreme, če tega priročnika niste v celoti prebrali in razumeli.</li> <li>• Če tega opozorila ne upoštevate, se lahko zaradi električnega udara, mehanskih ali drugih nevarnosti poškoduje ponudnik storitev, operater ali bolnik.</li> </ul>
ADVERTENCIA (ES)	<p>Este manual de servicio sólo existe en inglés.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• No se deberá dar servicio técnico al equipo, sin haber consultado y comprendido este manual de servicio.</li> <li>• 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.</li> </ul>

## Service Manual Language Information (cont'd.)

<p>VARNING (SV)</p>	<p>Den här servicehandboken finns bara tillgänglig på engelska.</p> <ul style="list-style-type: none"> <li>• Om en kunds servicetekniker har behov av ett annat språk än engelska ansvarar kunden för att tillhandahålla översättningstjänster.</li> <li>• Försök inte utföra service på utrustningen om du inte har läst och förstår den här servicehandboken.</li> <li>• 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.</li> </ul>
<p>UYARI (TR)</p>	<p>Bu servis kılavuzunun sadece İngilizcesi mevcuttur.</p> <ul style="list-style-type: none"> <li>• Eğer müşteri teknisyeni bu kılavuzu İngilizce dışında bir başka lisandan talep ederse, bunu tercüme ettirmek müşteriye düşer.</li> <li>• Servis kılavuzunu okuyup anlamadan ekipmanlara müdahale etmeyiniz.</li> <li>• Bu uyarıya uyulmaması, elektrik, mekanik veya diğer tehlikelerden dolayı teknisyen, operatör veya hastanın yaralanmasına yol açabilir.</li> </ul>
<p>ЗАСТЕРЕЖЕННЯ (UK)</p>	<p>Дане керівництво з сервісного обслуговування постачається виключно англійською мовою.</p> <ul style="list-style-type: none"> <li>• Якщо сервісний інженер потребує керівництво іншою мовою, користувач зобов'язаний забезпечити послуги перекладача.</li> <li>• Не намагайтеся здійснювати технічне обслуговування даного обладнання, якщо ви не читали, або не зрозуміли інформацію, надану в керівництві з сервісного обслуговування.</li> <li>• Недотримання цього застереження може призвести до травмування сервісного інженера, користувача даного обладнання або пацієнта внаслідок електричного шоку, механічного ушкодження або з інших причин невірного обслуговування обладнання.</li> </ul>
<p>CẢNH BÁO (VI)</p>	<p>Tài Liệu Hướng Dẫn Sửa Chữa chỉ có bản tiếng Anh.</p> <ul style="list-style-type: none"> <li>• 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.</li> <li>• Không được sửa chữa thiết bị trừ khi đã tham khảo và hiểu Tài liệu Hướng dẫn Sửa chữa.</li> <li>• 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.</li> </ul>



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# 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

The MUSE Cardiology Information System Devices and Interfaces manual is intended for:

- Qualified GE Healthcare service engineers
- Third-party service engineers authorized by GE Healthcare.

**NOTE:**

Do not attempt to install the MUSE system devices and interfaces if you are not part of the intended audience or have not read and understood these instructions in their entirety.

## Manual Purpose

This document provides information on installing and configuring:

- MUSE API
- MUSE Monitoring Gateway
- MUSE Web
- CASE to MUSE
- MARS to MUSE communication

Each section describes how to install the correct options and services on the MUSE system and how to set up communication between the MUSE system and the communicating device.

## Document Conventions

This manual uses the following conventions.

### Typographical Conventions

Convention	Description
<b>Bold Text</b>	Indicates keys on the keyboard, text to enter, or hardware items such as buttons or switches on the equipment.
<b><i>Italicized-Bold Text</i></b>	Indicates software terms that identify menu items, buttons or options in various windows.
<b>CTRL+ESC</b>	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 <b>CTRL+ESC</b> means to press and hold the <b>CTRL</b> key and then press and release the <b>ESC</b> key.
<b>&lt;space&gt;</b>	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 <b>&lt;space&gt;</b> . 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.
<b>Enter</b>	Indicates that you must press the <b>Enter</b> or <b>Return</b> key on the keyboard. Do not type <b>Enter</b> .
<b>&gt;</b>	<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 <b>System</b> &gt; <b>Setup</b> &gt; <b>Options</b> to open the <b>Option Activation</b> window" replaces the following:</p> <ol style="list-style-type: none"> <li>1. From the main menu, select <b>System</b> to open the <b>System</b> menu.</li> <li>2. From the <b>System</b> menu, select <b>Setup</b> to open the <b>Setup</b> menu.</li> <li>3. From the <b>Setup</b> menu, select <b>Options</b> to open the <b>Option Activation</b> window.</li> </ol>

### 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.

## Related Documents

The following documents provide additional information that may be helpful in the installation, configuration, maintenance, and use of this system.

### Documents Related to the MUSE Cardiology Information System Devices and Interfaces Manual

Part Number	Document Title
2034539-049	MUSE Cardiology Information System Installation Manual
2034539-042	MUSE Cardiology Information System Operator's Manual
2034539-044	MUSE Cardiology Information System Pre-Installation Manual

## 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.





# MUSE API Installation and Configuration for VA VistA Imaging

If you did not install the MUSE API when you originally installed the MUSE system, you may use the MUSE InstallShield to install the MUSE API as described in this chapter.

## Introduction

MUSE API is an Application Programming Interface that allows a third party to query the MUSE system for patient demographics and patient test information.

MACCRA is an acronym for **MUSE API COM Component for Remote Access**. It is a distributed COM (DCOM) component that works with the MUSE API and Web Interface on the MUSE system to provide access to the MUSE database. (COM is the acronym for Component Object Model.)

## VA VistA Imaging

Vista Imaging is the software the US Veterans Administration (VA) hospitals use to interface with the MUSE system. Installation of the MUSE API at VA facilities must be closely coordinated with the local IT department, since it requires installation of the VistA Imaging client and any appropriate VistA Imaging client patches or setup. GE Healthcare service is responsible for installing the MUSE API and MACCRA service on the MUSE system. The VA hospital is responsible for installing the VA VistA Imaging clients.

## Verifying and Installing COM+ Network Access

Verify, and if necessary, install **COM+ Network Access** on the MUSE application server.

COM+ Network Access is required for the MUSE MACCRA service.

### On Windows 2003 Server

1. Log on as a local Administrator.
2. Click **Start > Control Panel > Add or Remove Programs**.  
The **Add or Remove Programs** window opens.
3. Click **Add/Remove Windows Components**.  
The **Windows Components Wizard** opens.

4. Select **Application Server** and click **Details**.
5. Select **Enable COM+ Network Access**.
6. Click **OK** to save the settings and complete the installation of the **COM+ Network Access**.

### On Windows 2008 Server

1. Log on as local Administrator.
2. Click **Start > Administrative Tools > Server Manager**.
3. Expand **Roles**.
4. Do one of the following:
  - If the **Application Server** role is listed:
    - a. Right-click on it and select **Add Role Services**.
    - b. Check **COM+ Network Access** and click **Next**.
    - c. Click **Install**.
  - If the **Application Server** role is not listed:
    - a. Right-click **Roles** and select **Add Roles**.  
The **Select Server Roles** window opens.
    - b. Select **Application Server**.
    - c. Click **Next**.  
The **Introduction to Application Server** window opens.
    - d. Click **Next**.  
The **Select Role Services** window opens.
    - e. Select **COM+ Network Access**.
    - f. Click **Next** then **Install** to install **COM+ Network Access**.

## Installing the MUSE API and MACCRA

To install the MUSE API and MACCRA, you need the following items:

- A MUSE server running a valid server operating system for the MUSE system
- COM+ Network Access as described in [“Verifying and Installing COM+ Network Access”](#)

Installation of MUSE API and MACCRA does the following:

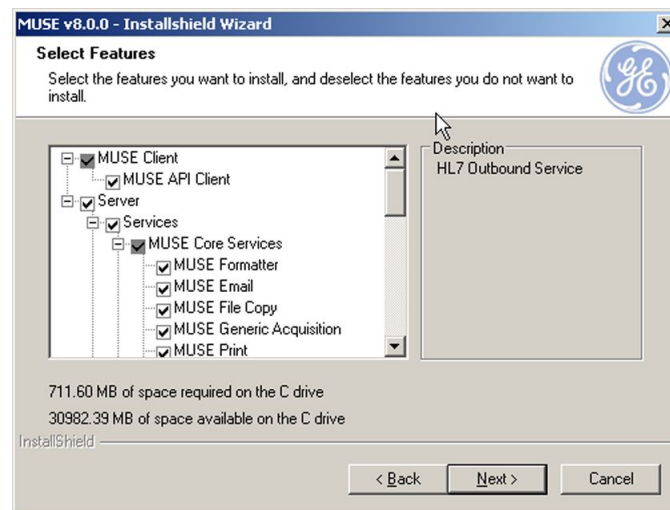
- Installs and registers the MACCRA application.
- Adds the Everyone group to the DCOM group.
- Configures MUSE MACCRA service and MACCRA DCOM settings.
- Installs and registers the MACCRA proxy/stub dll.

### NOTE:

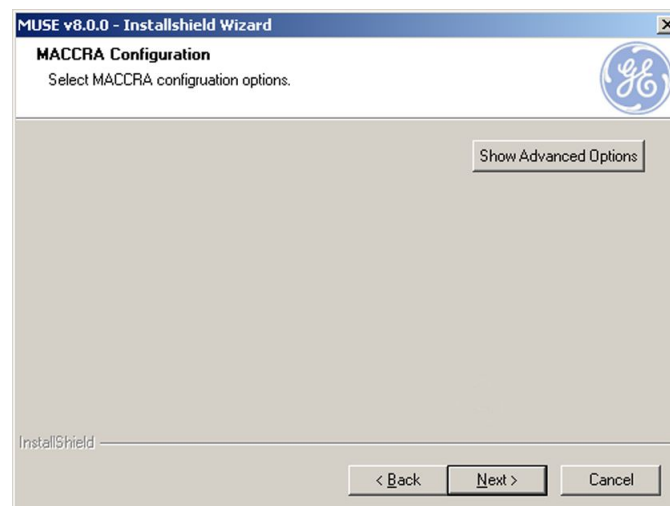
Installation of the MUSE API and MACCRA service restarts MUSE services. Before adding MUSE API, if the MUSE system is currently in use, perform an automatic shutdown of the MUSE system to notify MUSE users that the system is shutting down.

Use the following procedures to install the MUSE API and MACCRA service:

1. Log on to the Muse application server as a local administrator.
2. Access the **MUSE v8.x** entry in the **Installed Programs** list.
  - In Windows 2003: Click **Start > Control Panel** and select **Add or Remove Programs**.
  - In Windows 2008: Click **Start > Control Panel > Classic View > Programs and Features**.
3. Select **MUSE 8.x** and click **Change**.  
The **Welcome** screen opens.
4. Choose **Modify** and click **Next**.  
The **Select Feature** window opens.

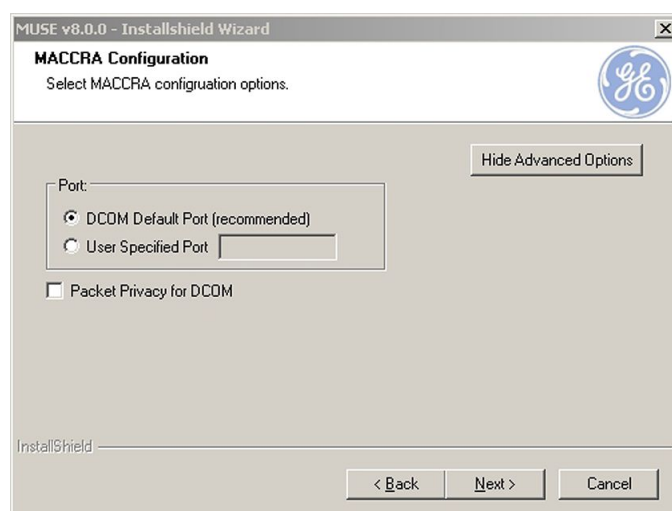


5. Ensure that **MUSE API Client** and **MACCRA** are checked in the tree view and click **Next**.
6. Continue to click **Next** on each window until the **MACCRA Configuration** window opens.



7. Click **Show Advanced Options**.

The window expands to display the **DCOM Port Options**.



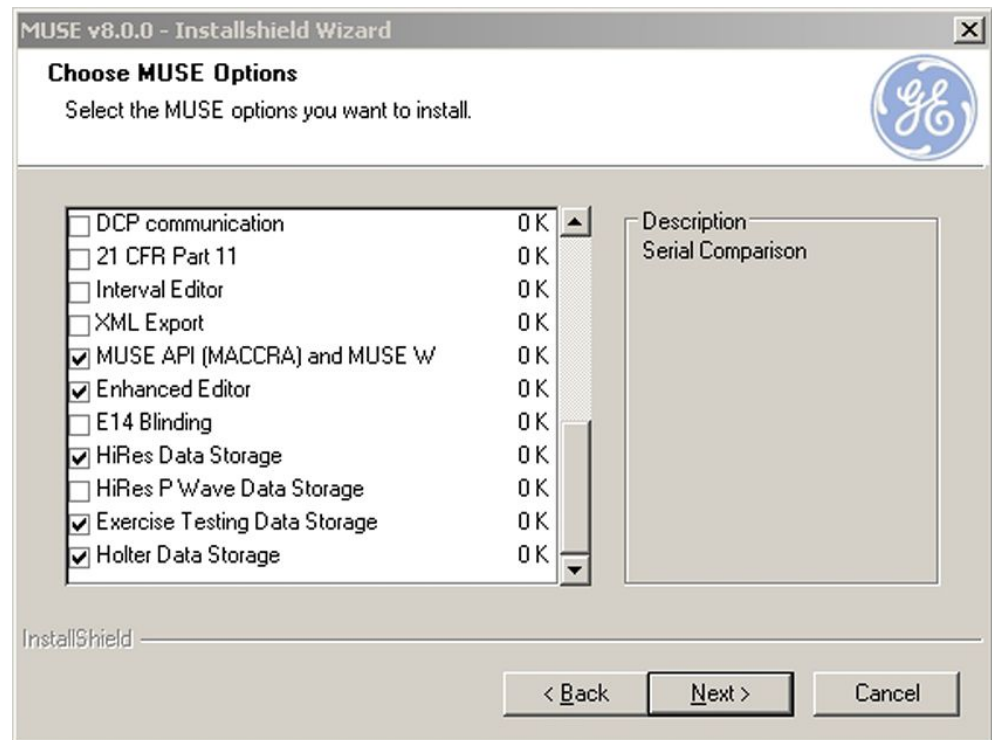
8. Verify that **DCOM Default Port** is selected and that **Packet Privacy for DCOM** is not selected.

The following table provides additional information for the advanced options. These options do not allow for a range of ports. When installing MUSE API for use with VA VistA Imaging, the port range is 48000 to 48100. You must set up these ports manually following the instructions in ["Setting a Port Range for DCOM"](#) on page 29.

#### MACCRA Configuration Advanced Options Fields

Field	Value	Comments
DCOM Default Port	The DCOM service AUTOMATICALLY DETERMINES which port to use.	For customers who want to set a specific port: 1. Select <b>User Specified Port</b> . 2. Enter a port value in the box.
User Specified Port	Identifies the port the MACCRA service uses to communicate with the MUSE system. If this parameter is not set, the DCOM service determines which port to use.  If you are using the API behind a firewall, you must configure the firewall to allow traffic to and from the selected port.	<b>NOTE:</b> Some customers request a range of ports are made available for the DCOM service. In these special cases, follow the instructions in <a href="#">""</a> on page . These changes are not reflected in the MUSE InstallShield.
Packet Privacy for DCOM	Indicates whether packets sent to and retrieved from the MUSE system are encrypted, providing additional security for any sensitive data.	If you are not using this parameter, the installation program assumes that the data is not being encrypted.

9. Continue to click **Next** on each window until the **Choose MUSE Options** window opens.



10. Ensure that the **MUSE API (MACCRA) and MUSE W** option is selected and click **Next**.
11. Enter the **Options** configuration password and click **Next**.  
If you do not know the password, contact GE Healthcare Technical Support.
12. Click **Next** to bypass the remaining windows.  
The InstallShield installs the changes selected and restarts the MUSE services.  
If you are installing MUSE API to work with VA VistA, continue with "[Configuring VA VistA Imaging Formats for MUSE v8.x](#)".

## Configuring VA VistA Imaging Formats for MUSE v8.x

The VA VistA Imaging interface to MUSE v8.x uses the MUSE format settings to determine the format for each of the four data types (ECG, HiRes, Stress, and Holter). As required by the VistA Imaging software, the interface also requires a VOL000 share on the MUSE server. Configuring the MUSE application server to meet this requirement consists of the following tasks:

1. Configuring the VOL000 share.
2. Running the VA VistA Configuration utility.
3. Checking out the MUSE API.

## Configuring the VOL000 Share

Use the following procedure to configure the VOL000 share.

1. Create a **\VOL000** folder on the MUSE server.  
For convention, create it on the partition where the database resides. No files are required in the folder.
2. Share the folder as **VOL000**.
3. Assign permissions to the **Imaging IU** accounts that were added to the MUSE users group on the MUSE server.  
The accounts should look something like this: **VHAxxx\VHAxxxIU**.  
Where **xxx** is a standard 3-character code for the site. You may add more than one IU account to the MUSE users group if remote sites access the MUSE server.

## The VA VistA Configuration Utility

The VA VistA Configuration Utility AUTOMATICALLY makes the following changes to the default setup configurations in the MUSE system and updates the **cfgDeviceFormats** table in the MUSE database to reflect the new formats' IDs.

Creates a new ECG Format named **VistA ECG** and a new HiRes Format named **VistA HiRes** as follows:

### ECG Format for VistA ECG and VistA HiRes

	Setting
Display Barcode	no
Grid Type	grid
Fonts	Helvetica
Diagnosis Font Size	3.5 mm

Creates a new Stress Format for VistA named **VistA Stress** as follows:

### Stress Format for VistA Stress

	Settings
Display Barcode	no
Grid Type	grid
Fonts	Helvetica
Diagnosis Font Size	3.5 mm
<b>Stress Specific Settings</b>	
Graded Exercise Summary	checked
Trend & Medians Report	checked
Selected Medians Report	checked

### Stress Format for VistA Stress (cont'd.)

	Settings
ST Slope Info	checked
Report Template	Report 1

Creates a new Holter Format named **VistA Holter** as follows:

### Holter Format for VistA Holter

	Settings
Display Barcode	no
Grid Type	grid
Fonts	Helvetica
Diagnosis Font Size	3.5 mm
<b>Holter Specific:</b> Hourly Summary Page Trend pages Narrative Summary Strip Pages ST Summary page Histograms	

## Running the VA VistA Configuration Utility

Use the following procedure to run the configuration utility for VA VistA. You must run the utility on the server where SQL and the MUSE databases reside.

1. Log on to the system.
2. Run **c:\Program Files\MUSE\VAVistAConfig.exe**.  
The file is located on the same drive as the MUSE system installation. If MUSE is installed on a drive other than the **c:\** drive, that is where **VAVistAConfig.exe** is located.
3. Select **SQL server (local)**.  
If the SQL server and application server are on separate servers, click **Browse** and select the correct SQL server.
4. Select the database.  
The default is **MUSE\_System** and normally does not need to be changed. There may be rare instances where a prefix other than **MUSE** was used during installation of the MUSE database.
5. Click **Add VA VistA Formats**.  
If this button is grayed out, they were already added.

6. Click **Exit**.
7. In the MUSE system, select **Setups > Formats** and verify that the four new formats were added: VistA ECG, VistA HiRes, VistA Stress, and VistA Holter.

**NOTE:**

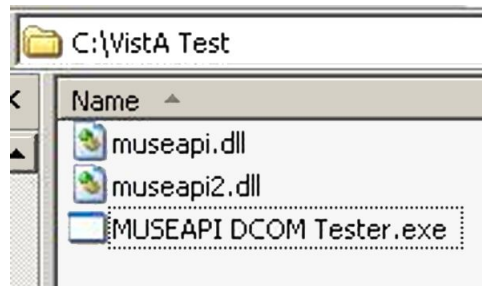
If you need to remove the new formats, follow the previous procedure and click the **Remove VA VistA Formats** button in step 5 instead of **Add VA VistA Formats**.

## Testing the VistA Imaging/MUSE Interface

This section describes steps for testing the VistA Imaging to Muse Interface locally on the MUSE database/application server. The assumption is that the MUSE API option was already installed following the documented procedure. If the interface is working properly on the MUSE server, based on this testing, the local VA team can use a similar testing procedure from one of their VistA clients if necessary. If it works on the MUSE server, but not from a VistA Imaging client, that could be an indication that they have something configured incorrectly, or that there is some type of network or network access problem.

The following procedure describes how to use the DCOM Tester Application.

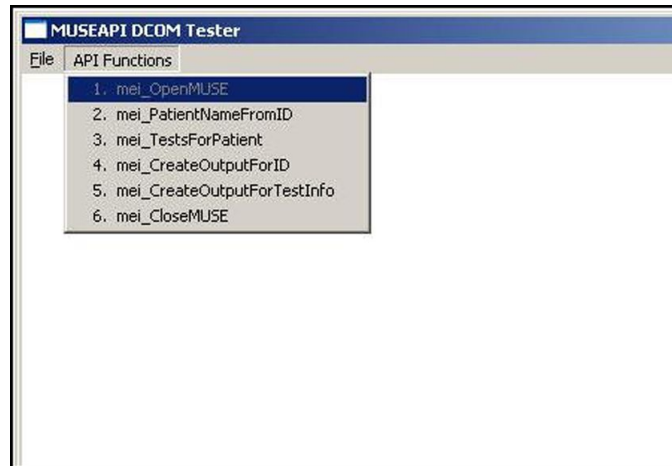
1. Create a folder, such as **C:\VistA Test**, that contains the following files: **museapi.dll**, **museapi2.dll**, **MUSEAPI DCOM Tester.exe**.



2. Document a Patient ID that has one or more ECG tests on the MUSE system. You can use one from the **Edit List**.
3. Run **MUSEAPI DCOM Tester.exe**,



4. Under the **API Functions** menu, select **mei\_OpenMUSE**.



The **mei\_OpenMUSE()** dialog box opens.



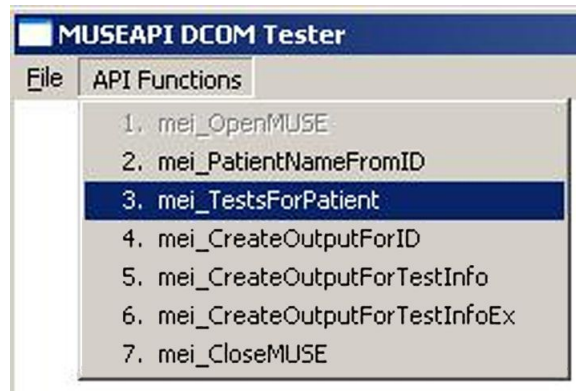
5. Enter a valid **MUSE Site number** and click **OK**.

The dialog box closes and you should receive a message indicating the operation was successful.



If the operation is not successful, verify that you entered a valid site number.

6. From the **API Functions** menu, select **mei\_TestsForPatient**.



The **TestsForPatient** window opens.

MUSEAPI DCOM Tester

File API Functions

**TestsForPatient**

Patient ID: 259355265

Test Month: 255 Test Hour: 255

Test Day: 255 Test Min: 255

Test Year: 65535 Test Sec: 255

Test Type: 1

OK Cancel

7. Enter the **Patient ID** that you documented previously and click **OK**. You should get a message showing a list of tests for that patient.

MUSEAPI DCOM Tester

File API Functions

**mei\_OpenTestsForPatient**

Found 1 entries for PID: 259355265, Test Type=1

Entry 1: Test Date:25-04-2004, Test Time: 10:40:08, PSIG = 17

OK

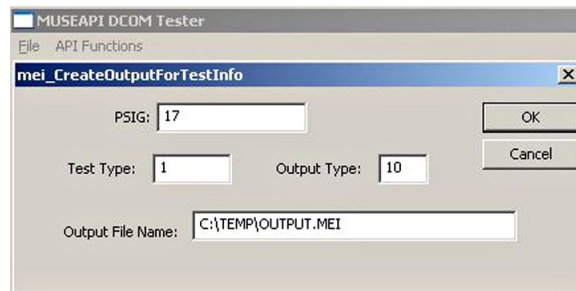
8. Document the **PSIG** number of an ECG test (Test Type 1) on the list.
9. From the **API Functions** menu, select **mei\_CreateOutputForTestInfo**.

MUSEAPI DCOM Tester

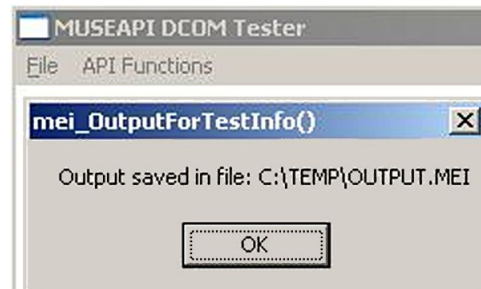
File API Functions

- 1. mei\_OpenMUSE
- 2. mei\_PatientNameFromID
- 3. mei\_TestsForPatient
- 4. mei\_CreateOutputForID
- 5. mei\_CreateOutputForTestInfo**
- 6. mei\_CreateOutputForTestInfoEx
- 7. mei\_CloseMUSE

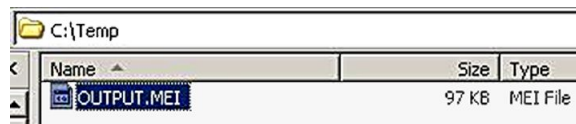
10. Enter the **PSIG** number you documented earlier, change the **Output Type** to 10, and change the default **Output File Name** to a **.MEI** extension.



11. Click **OK**.  
You should receive a message that the file was saved.



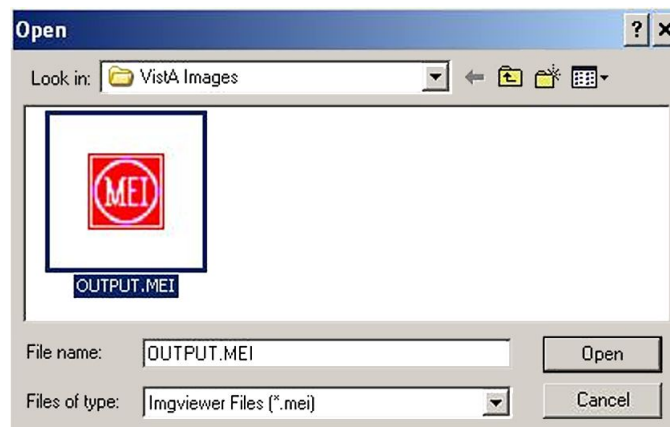
The file should be saved in the designated folder.



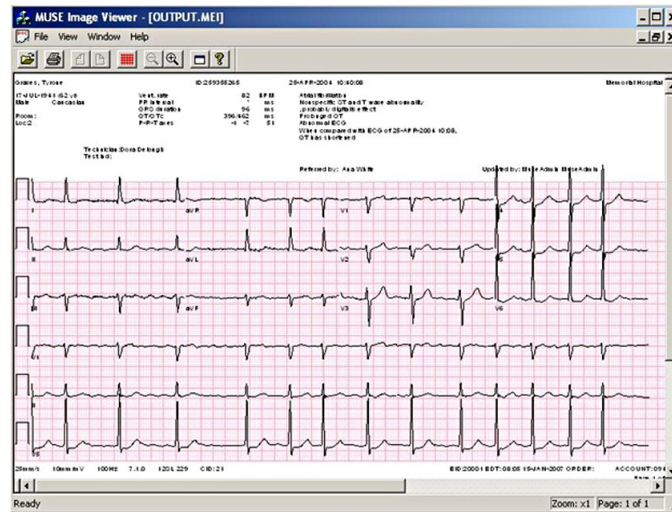
12. Using the **imgview.exe** application, open the file that was saved.

**NOTE:**

You should copy the file to your system first, rather than copy **imgview.exe** to the MUSE system.



You are now able to view the test that you saved.



## Troubleshooting the Installation

If you encounter any issues after the installation, use the following techniques to help troubleshoot the issue:

- Verify the MUSE MACCRA service is running.
- Verify the MUSE API users.

## Verifying the MUSE MACCRA Service

Use the following instructions to verify that the MUSE MACCRA service is installed correctly.

1. Log on to the MUSE application server as a user with administrator rights.
2. From the Windows desktop, select **Start > Control Panel > Administrative Tools > Services**.  
The **Services** window opens.
3. Verify that the **MUSE MACCRA** service is listed.
  - If the **MUSE MACCRA** service is not listed, run the MUSE InstallShield in **modify** mode, as described previously, to add the MUSE API and MACCRA features.
  - If **MUSE MACCRA** exists, continue to the next step.
4. Right-click on **MUSE MACCRA** and select **Properties**.  
The **MACCRA Properties** window opens to the **General** tab.
5. On the **General** tab, verify that the **Startup type** is **Manual**.  
MACCRA AUTOMATICALLY STARTS as needed.

6. In the **Log On** tab, verify that the **Logon** account is set to the same account that is used for the other MUSE services.  
Typically this is the **MUSEBkgnd** account.
7. Click **OK** to close the window.

## Verifying the Users

Use the following instructions to verify that the **Everyone** group was added to the **Distributed COM Users** group.

1. Log on to the MUSE application server as an administrator.
2. **Select Start > Control Panel > Administrator Tools > Computer Management.**  
The **Computer Management** window opens.
3. Select **Local Users and Groups > Groups** and verify that a **Distributed COM Users** group is listed.
4. Double-click on the **Distributed COM Users** group and verify that **Everyone** is a member of the group.  
If **Everyone** is missing, add it to the group.

## Setting a Port Range for DCOM

During the MUSE API installation, the advanced MACCRA configuration allows you to specify only a single DCOM port, instead of allowing the system to establish the port on its own.

There may be some instances where a customer wants to specify a range of ports rather than a single port. To do this, you must manually adjust the DCOM Protocol using the following procedure.

### NOTE:

For incoming communication, you can configure RPC dynamic port allocation to select ports within a restricted range above 1024. Then configure your firewall to confine incoming external communication to only those ports and port 135, which is the RPC endpoint mapper port.

For example, to specify a port range of 48,000 through 48,100:

1. Click **Start > Run**.
2. Type **dcomcnfg** and press **Enter**.  
The **Component Services** window opens.
3. Expand the **Component Services** and **Computers** nodes.
4. Right-click **My Computer** and select **Properties**.
5. Click the **Default Protocols** tab.
6. In the **DCOM Protocols** list box, select **Connection-oriented TCP/IP**.
7. Click **Properties**.
8. In the **Properties for COM Internet Services** dialog box, click **Add**.

9. In the **Port range** text box, add a port range and click **OK**.  
In this example, you would add the port range 48000–48100.

**NOTE:**

Leave the **Port range assignment** and the **Default dynamic port allocation** options set to **Internet range**.

10. Click **OK** twice to close the dialog boxes.
11. Restart your computer so the changes can take effect.

# 3

## MUSE Monitoring Gateway Software Installation

Follow the instructions in this chapter to complete the installation of the Monitoring Gateway v1.1. This procedure describes how to:

- Install and configure the **RWhat** and **TFTP** services on a MUSE Monitoring Gateway.
- Configure MUSE software version 8.0 to receive data from the real-time monitoring network.

Monitoring Gateway v1.1 supports all network classes.

### System Requirements

Ensure you meet the following requirements before continuing with the installation:

System	Requirements
Monitoring Gateway	<ul style="list-style-type: none"><li>• Windows 7 (Home Premium, Business, or Ultimate) or Windows XP Professional.</li></ul> <p><b>NOTE:</b> Only the English version is supported.</p> <ul style="list-style-type: none"><li>• One Network Interface Card (NIC) connected to the Local Area Network (LAN) on which the MUSE resides.</li><li>• One NIC connected to the Carescape Network.</li><li>• No previous MUSE client installations (that is, the system should have no leftover traces of a previous MUSE installation, such as MUSE-specific entries in the <b>win.ini</b> file).</li></ul>
MUSE Application Server	Able to connect to shares on the Monitoring Gateway.

For more information, refer to the **MUSE Cardiology Information System Pre-Installation Manual**.

## Setup Procedures

The MUSE Monitoring Gateway software installation consists of the following tasks:

1. Removing the previous version, if one is installed.
2. Creating a share on the Monitoring Gateway.
3. Verifying the network connections.
4. Setting up the MUSE application server.
5. Installing the services on the Monitoring Gateway.

**NOTE:**

You need to have **.NET Framework 3.5** before installing Monitoring Gateway. If your system does not have **.NET Framework 3.5** installed, you receive a prompt during installation that it must be installed before continuing. Installing **.NET Framework 3.5** requires a valid Internet connection. If a valid Internet connection is not available, download this package from <http://www.microsoft.com> and search for **.Net Framework 3.5 full package**.

## Removing the Previous Version

If a previous version of Monitoring Gateway is installed, use the following procedure to stop and delete the existing **RWHAT** and **TFTP** services before reinstalling the Monitoring Gateway.

**NOTE:**

The service names for Monitoring Gateway 1.1 are **MUSE Gateway RWhat** and **MUSE Gateway TFTP**. If the services installed are labeled **RWHAT** and **TFTP**, the previous version of the Monitoring Gateway is installed and you need to remove it.

1. Open a command line prompt.
2. Type **SC stop TFTP** and press **Enter**.
3. Type **SC delete TFTP** and press **Enter**.
4. Type **SC stop RWHAT** and press **Enter**.
5. Type **SC delete RWHAT** and press **Enter**.
6. Close the command line prompt.

**NOTE:**

To keep a record of the existing **monitorgateway.ini** settings, rename the current **C:\Program Files\monitorgateway\monitorgateway.ini** file and move it to a different folder.

7. Delete the directory **C:\Program Files\monitorgateway**.
8. Restart the system.



## Creating a Share on the Monitoring Gateway

Use the following procedure to set up a folder on the Monitoring Gateway that the MUSE application server can access.

1. Create a **C:\ACQMON** folder on the Monitoring Gateway system.

**NOTE:**

If a previous version of Monitoring Gateway was installed, the folder may already exist. However, it is still a good idea to verify the folder permissions.

2. Share the **ACQMON** folder created in step 1.
3. On the MUSE application server, determine what user account is running the MUSE services.  
Typically, this is the default **MUSEBkgnd** account. However, for security reasons the customer may be using a different account.
4. Give this account full permissions to the ACQMON folder shared in step 2.  
If necessary, create an identical user account locally on the Gateway, using the same password.

## Verifying Network Connections

Verify that the Monitoring Gateway has two Network Interface Cards (NIC) with the following network connections:

### Network Settings

Network	IP Address	Subnet Mask
Carescape Network (new installations)	172.16.0.1	255.255.0.0
Unity Network (previous installations)	126.8.8.1	255.0.0.0
LAN on which the MUSE resides	any static or dynamically-assigned IP address	

**NOTE:**

The network settings listed in the Network Settings table are defaults. The IP address and subnet mask may be different for custom configured networks.

**CAUTION:**

**ELECTRIC SHOCK** If you open the Monitoring Gateway to verify or install an NIC, observe proper grounding procedures.

## Setting Up the MUSE Application Server

To ensure that the MUSE system can locate and communicate with the Monitoring Gateway, use the following procedure to add the path of each gateway to the MUSE

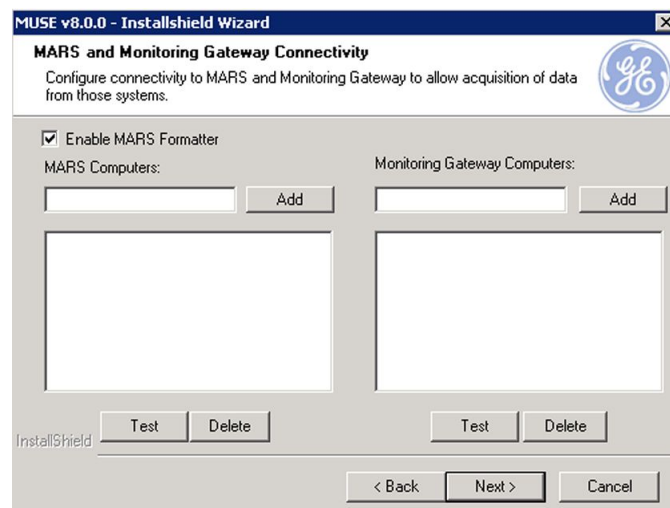
database. If the gateway was installed during the initial MUSE installation, this may already be done.

**NOTE:**

Adding or deleting a Monitoring Gateway to the MUSE system using the MUSE InstallShield AUTOMATICALLY RESTARTS the MUSE services. Before starting the following procedure, advise the customer that the MUSE system will be shut down for a brief time while the change is applied.

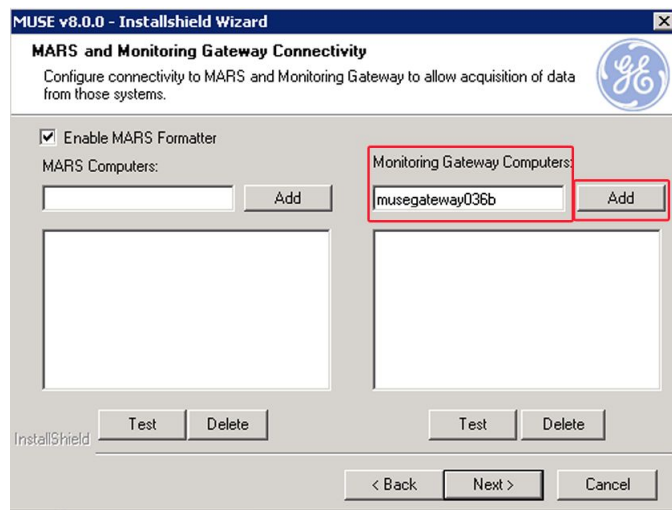
Do not make any changes to the existing installation configuration except for those described in this procedure unless you understand their effect on the MUSE system.

1. Log on to the MUSE application server as an administrator. Open the **Control Panel** and select **Add or Remove Programs**.
2. Access the MUSE v8.x entry in the installed programs list:
  - In Windows 2003: Click **Start > Control Panel** and select **Add or Remove Programs**.
  - In Windows 2008: Click **Start > Control Panel > Classic View > Programs and Features**.
3. Select **MUSE 8.x** and click **Change**.  
The **Welcome** window opens.
4. Select **Modify** and click **Next**.  
The **Select Features** window opens.
5. Continue to click **Next** on each window until you reach the **MARS and Monitoring Gateway connectivity** window.



6. If the **Enable MARS Formatter** option is not checked, select the check box to enable the option.  
This option should always be checked.

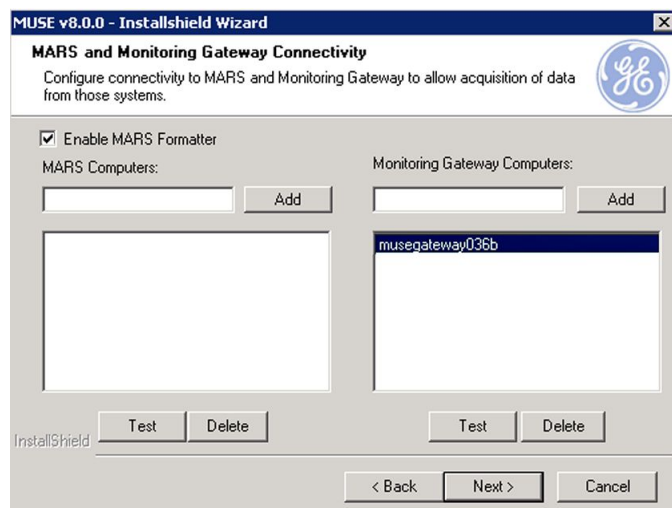
7. Enter the name of the computer or the IP Address of the Monitoring Gateway in the **Monitoring Gateway Computer** side of the window.



8. Click **Add**.  
This adds the item to the system.

**NOTE:**

You can also delete a gateway at this time.

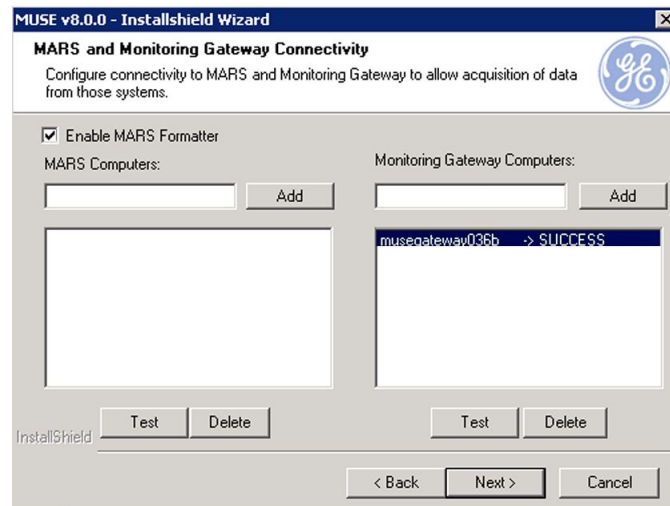


9. Click **Test**.  
This tests that the MUSE server and Monitoring Gateway can communicate over the network and displays if the test was successful. If the test fails, you can continue with the installation but need to establish network communication

between the MUSE server and the gateway before the MUSE system can acquire ECGs.

**NOTE:**

This test only attempts to **ping** the gateway, it does not verify the **acqmon** folder share permissions.



10. Click **Next**.

The **Maintenance Complete** window opens.

11. Click **Finish**.

If you do not receive the message that MUSE services are restarting, you need to restart the **MUSE Generacq** service manually.

## Installing the Services on Monitoring Gateway

Installing the services on the Monitoring Gateway includes:

- Installing the services
- Verifying operation

### Installing the Services

Use the following instructions to install the required services on the Monitoring Gateway:

1. Insert the MUSE Monitor Gateway CD in the optical drive.
2. Run **setup.exe**.

**NOTE:**

If you have not installed **.NET Framework 3.5** you receive a message that you must install it before continuing. See ["Setup Procedures" on page 32](#) for information on downloading **.NET Framework 3.5**.

3. Follow the prompts until the installer completes.

4. Go to the **Services** menu and use the following instructions:
  - a. Right-click **My Computer** and select **Manage**.
  - b. In the **Computer Management** window, expand **Services and Applications** and double-click **Services**.
  - c. Verify the **MUSE Gateway RWhat** and **MUSE Gateway TFTP** services are installed and started.
5. If the IP address used is not the default address 126.8.8.1, edit the **monitorgateway.ini** as follows:
  - a. Open **c:\Program Files\monitorgateway\monitorgateway.ini** in Notepad and delete the semicolon ( ; ) in the **RWhat=** line.
  - b. Edit the **IP address** in the **RWhat=** line with the IP address of the Monitoring Gateway that is connected to the monitoring network.  
For example, if the IP address of the Monitoring Gateway is 192.168.0.1, the line should be **RWhat=192.168.0.1**.
  - c. Delete the semicolon in the **RWhat\_Subnet=** line.
  - d. Edit the subnet address in the **RWhat\_Subnet=** with the subnet of the monitoring network that the gateway is on.  
For example, if the subnet of the Monitoring Gateway is 255.255.0.0, the line should be **RWhat\_Subnet=255.255.0.0**.
  - e. Save your changes and exit Notepad.

**NOTE:**  
You may need to enable **FullControl** in the **monitorgateway** folder to allow editing and saving the **monitorgateway.ini** file.
6. Restart the Monitoring Gateway system.
7. Verify that both **MUSE Gateway RWhat** and **MUSE Gateway TFTP** services are started.

## Verifying Operation

1. From a bedside monitor, transmit 12SL to MUSE.
2. In MUSE, select **System Status**.
3. Select **Newly Acquired** or **Acquisition Log**.
4. Check that the **PID/Name** of the ECG transmitted was acquired.

## Troubleshooting

Use the following troubleshooting tips if the Monitoring Gateway was installed and configured correctly, but the bedside monitor is still unable to send data to it.

### Troubleshooting Tips

Symptom	Condition	Action
Monitoring Gateway is not available on the bedside monitor.	Some monitors may not see a new Monitoring Gateway on the Carescape network. This is especially common when the Monitoring Gateway has recently changed IP addresses.	Restarting the monitor should resolve this issue.
Monitoring Gateway is available from the bedside monitor but cannot receive data.	The Monitoring Gateway system has a firewall in place.	<p>You need to add the following exceptions to the firewall:</p> <ul style="list-style-type: none"> <li>• <b>TFTP (UDP prt 69):</b> allows communication from the monitors to the monitoring Gateway.</li> <li>• <b>Windows File Sharing:</b> allows communication from the MUSE to the Monitoring Gateway. Depending on how the router and networks are configured, you may need to specify the MUSE IP address in the exceptions.</li> </ul>

## Removing Monitoring Gateway 1.1

Before reinstalling the Monitoring Gateway, you need to remove it. Use the following procedure to remove Monitoring Gateway 1.1.

1. Copy **C:\Program File\MonitorGateway\monitorgateway.ini** to a different folder and rename it.  
This is not needed for the reinstall, but it may be useful later if you want to see what the original settings were.
2. Select **Control Panel > Add or Remove Programs**.
3. Select **Monitoring Gateway 1.1** and click **Enter**.
4. Select **Remove** and click **Enter**.  
This removes the **MUSE Gateway RWhat** and **MUSE Gateway TFTP** services, and deletes the **monitorgateway** folder.
5. You can now reinstall the Monitoring Gateway software.

# MUSE Web (Enterprise Integration) Installation

This section provides instructions for installing the MUSE Web (Enterprise Integration) system on a MUSE v8 server.

## System Requirements

1. Verify, and if necessary, install windows Internet Information Services (IIS) on the MUSE application server.
  - Select **Start > Administrative Tools > Internet Information Services (IIS) Manager** and verify that IIS manager is listed and you can open it.
  - If IIS is not installed, you need to install it on the server before proceeding.

### NOTE:

If the MUSE system resides on a Windows 2008 server, it also needs IIS Manager 6.0 installed. See *Appendix A* in the **MUSE Cardiology Information System Installation Manual** for information on installing and configuring IIS.

When installing IIS on GE Healthcare-supplied G6 server hardware, you need the Windows Server 2003 Embedded OEM Pre-Installation CD 1 of 3. These CDs ship with the G6 server.

On customer-supplied hardware, contact the system administrators and advise them that IIS must be installed on the server.

2. Verify, and if necessary, install COM+ Access on the MUSE application server. COM+ Access is required for the MUSE MACCRA service.
  - On a Windows 2003 server:
    - a. Log on as local Administrator.
    - b. Click **Start > Control Panel > Add/Remove Programs**.
    - c. Click on **Add\Remove Windows Components**.
    - d. Select **Application Server** and click **Details**.

- e. Select **Enable Network COM+ Access**.
- f. Click **OK** to save the new settings and complete the installation of **Network COM+ Access**.
- On a Windows 2008 server:
  - a. Log on as local Administrator.
  - b. Click **Start > Administrative Tools > Server Manager**.
  - c. Expand **Roles**.
    - If the **Application Server** role is listed:
 

Right-click on **Application Server** and select **Add Role Services**.  
 Select **COM+ Network Access** and click **Next**.  
 Click **Install**.
    - If the Application Sever role is not listed:
 

Right-click **Roles** and select **Add Roles**.  
 In the **Select Server Roles** window, select **Application Server** and click **Next**.  
 On the **Introduction to Application Server** window, click **Next**.  
 In the **Select Role Services** window, check the **COM+ Network Access** box and click **Next**.  
 When prompted to install the **COM+ Network Access**, click **Install**.

## Installing MUSE Web

Use the following instructions to install MUSE Web on the MUSE application server.

Installation of MUSE Web does the following:

- Installs and configures the MUSE MACCRA service.
- Configures access and security of the COM and DCOM components.
- Creates and configures the MUSE Web site.
- Installs MUSE Web on **c:\inetpub\wwwroot\museweb**.
- Creates a **MUSE Web User** group.
- Grants the MUSE Web User group **modify** permissions for the **museweb** and **museweb\temp** folders.

### NOTE:

Installing MUSE Web on the MUSE v8 application server requires a restart of the MUSE services. Before starting the following procedures, advise the customer that the MUSE system needs to shut down for a brief time while the change is applied.

Do not make any changes to the existing installation configuration except for those described in this section unless you understand their effects on the MUSE system.

1. Log on to the MUSE application server as an administrator.
2. Have the customer turn off any antivirus software during the installation. It can be turned on again after the installation is complete.



3. Check the following:
  - a. If port 80 is going to be used for MUSE Web, change the port on the default Web site to something other than 80 or stop the default Web site.
  - b. Open **Task Manager** and check if the **net.exe** process is running. If it is, end the process before starting the MUSE install. Once MUSE Web is installed the **net.exe** process may run without affecting MUSE Web.
4. Access the **MUSE v8.x** entry in the **Installed Programs** list.
  - In Windows 2003: Click **Start > Control Panel** and select **Add or Remove Programs**.
  - In Windows 2008: Click **Start > Control Panel > Classic View > Programs and Features**.
5. Select **MUSE 8.x** and click **Change**.  
The **Welcome** window opens.
6. Select **Modify** and click **Next**.  
The **Select Features** window opens.
7. Select **MACCRA** and **MUSE Web** and click **Next**.
8. Continue to click **Next** on each window until you reach the **MUSE Web Configuration** window.

MUSE v8.0.0 - InstallShield Wizard

**MUSE Web Configuration**

Enter Muse Web user credentials and port configuration.

User Name:  
MKEMUSE\musebkngnd

Password:  
[Masked]

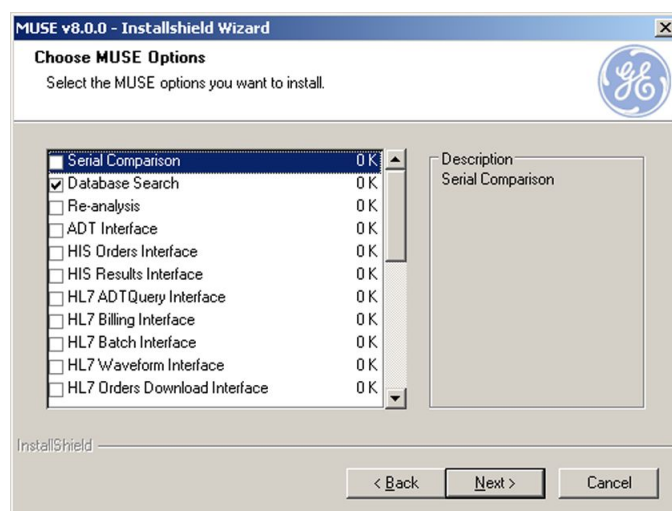
Port:  
80

InstallShield

< Back   Next >   Cancel

The user name and password default to whatever account was used for the **MUSEBkngnd** service account during the initial installation of the MUSE system. The port number default for the MUSE Web site is **80**. If you are using a different port, enter it now.

- Click **Next** until you reach the **Choose MUSE Options** window



- Check **MUSE API (MACCRA) and MUSE W.**
- Click **Next** until the **Maintenance Complete** window opens.
- Click **Finish** to install your changes.

## Verify MUSE Web Folder Permissions

Installation of MUSE Web sets the security permissions on the **C:\inetpub\wwwroot\museweb** to Read and Execute. In addition, the **C:\inetpub\wwwroot\museweb\temp** folder must be set as described below:

- Logon to the MUSE server as administrator.
- Browse to the **C:\inetpub\wwwroot\museweb** folder.
- Right click on the **temp** folder and select **Properties**.
- Click the **Security** tab and highlight **MUSE Web Users**.
- Verify that **Modify** is checked. If it isn't, check it now and apply the change.

## Adding Users to MUSE Web

Installation of MUSE Web creates a **MUSE Web User** group on the MUSE server. This group has permissions to the MUSE Web site.

Use the following instructions to enable a user to access the MUSE Web application:

- Create a MUSE account for the user.  
Be sure to include the user's Windows user name in the MUSE account. Refer to the **MUSE Cardiology Information System Operator's Manual** for instructions on how to set up MUSE users.
- Add the user to the **MUSE Web User** group on the MUSE server.

## Verifying the Installation

After installing the web server and adding users, use the following instructions to verify that the installation was successful.

1. Log on to a MUSE workstation.
2. Open **Internet Explorer**.
3. Type **http://<servername>/** in the address field.

For example, if the server name is MUSEAPP, you would enter **http://MUSEAppServer/** in the address field.

**NOTE:**

If MUSE Web is not using the default port 80, you need to include the port number in the URL.

For example, if you are using port 81, you enter: **http://MUSEAppServer:81**.

4. Press **Enter**.

The **Connect to <server name>** window opens.

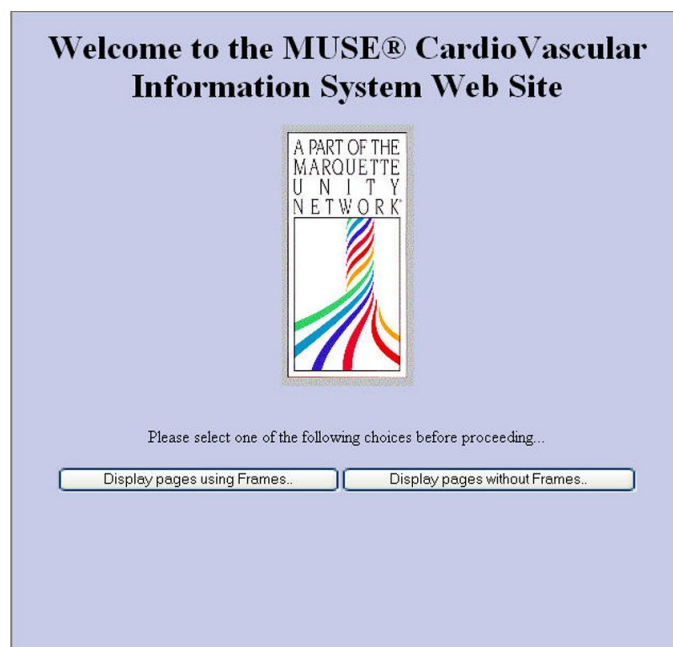


**NOTE:**

If this window does not open, there was a problem with the installation, the server configuration, or the IIS services. Refer to ["Troubleshooting the MUSE Web Installation" on page 45](#) for more information.

5. Enter the **User name** and **Password** of a MUSE user who is set up in the **MUSE Web User** group and click **OK**.

The **MUSE Web** home page opens.



**NOTE:**

If this page does not open, verify that the user you entered is a member of the MUSE Web User group, and that you entered the correct password.

6. Click either **Display pages with frames** or **Display pages without Frames**

A The following window opens.

If this window opens, the installation is complete.

If you get an error message instead, refer to [“Troubleshooting the MUSE Web Installation”](#) on page 45.

# Troubleshooting the MUSE Web Installation

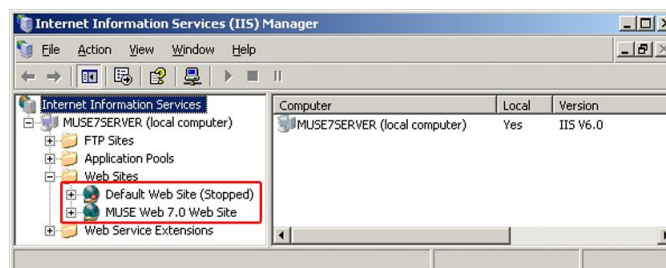
Verify that users and permissions are set correctly:

- The **MUSE Web User** group has **modify** permissions to the **c:\inetpub\wwwroot\museweb** and **c:\inetpub\wwwroot\museweb\temp** folders.
- The user trying to access MUSE Web was added as a user in the MUSE system and was added to the **MUSE Web User** group on the Muse server.

If the MUSE Web site is not accessible after the installation, there may be a conflict between the MUSE Web site port and the default Web site port created when Windows IIS was installed. If that is the case, you need to either stop or delete the default Web site or change its port number.

## In Windows 2003

1. Launch **IIS Manager**.
  - a. Select **Start > Control Panel > Administrative Tools > Internet Information Services (IIS) Manager**.
  - b. Expand selections in the left panel to **Web Sites**.



2. Verify that the **MUSE Web Site** started.
  - If the **MUSE Web Site** is started and the **Default Web Site** is stopped, exit the **IIS Manager** window. No further action is necessary.
  - If the **Default Web Site** is started and the **MUSE Web Site** is stopped, do ONE of the following and then exit the **IIS Manager**.
    - Stop the **Default Web Site** and start the **MUSE Web Site**,
    - Change the TCP Port of the **Default Web Site** to another number and then start the **MUSE Web Site**.
    - Delete the **Default Web Site** and then start the **MUSE Web Site**.

Condition 1	Condition 2	Response
MUSE Web Site is started	Default Web Site is stopped	Exit the IIS Manager. No further action is necessary.
Default Web Site is started	MUSE Web Site is stopped	<p>Do ONE of the following and then exit the IIS Manager:</p> <ul style="list-style-type: none"> <li>Stop the <b>Default Web Site</b> and start the <b>MUSE Web Site</b></li> <li>Change the <b>TCP</b> port of the <b>Default Web Site</b> to another number and then start the <b>MUSE Web Site</b></li> <li>Delete the <b>Default Web Site</b> and then start the <b>MUSE Web Site</b>.</li> </ul>

## In Windows 2008

1. Log on to the MUSE application server as an administrator.
2. Select **Start > Administrative Tools > Internet Information Services (IIS) Manager**.
3. Expand the **Server** name.
4. Double-click **Application Pools** and verify that the **MUSE Web App Pool** is started.  
If the **MUSE Web App Pool** is not started, click on it and select **Start**.
5. Expand **Sites**.
6. Right-click **MUSE Web Site** and select **Edit Bindings**.
7. Confirm that the **Port** number is correct.

If you need to change the port number, use the MUSE InstallShield to correct it. This ensures the configuration settings referenced by the InstallShield when it is in **Modify** mode are the same as the actual setting in IIS Manager.

# 5

## CASE to MUSE

This section describes the setup and configuration between a CASE system and a MUSE system, running version 8.0, to allow the two systems to share data. In these instructions, the term **CASE** denotes either CASE or CardioSoft.

### Communication Levels

The CASE to MUSE systems support three communication levels. Each level builds on the features and requirements of the previous level, as shown in the following table:

Communication Levels

Communication Level		Data Exchanged	Directions		Transfer Method	Required Options
			From	To		
	Record Transfer	CASE Reports	CASE	MUSE	Shared folder	MUSE Exercise Testing interface
	MUSE Web	MUSE Reports Patient Data	MUSE	CASE	Network	MUSE Web Interface (Enterprise integration)
	HIS Orders	Order Data	MUSE	CASE	Network	HIS Order Interface

The HIS Orders level includes the features and requirements of the MUSE Web level, which in turn includes the features and requirements of the Record Transfer level.

### Requirements

The customer is responsible for supplying the following:

- DHCP or IP address, subnet mask, and default gateway for the CASE system.
- The IP address, computer name, and domain name of the MUSE file server.
- A tested network node that can access the MUSE file server using TCP/IP.

- An appropriate name resolution method (WINS, DNS, or LMHOSTS table) for locating the MUSE system application server/web server.
- All necessary networking hardware, including hubs, routers, switches, and so forth.

If you are using the MUSE Web communication level, you must install the MUSE Web option before proceeding. Refer to [Chapter 4 “MUSE Web \(Enterprise Integration\) Installation” on page 39](#).

If you are using the HIS Orders communication level, you must install and fully configure the HIS Interface option before proceeding.

## Process Overview

While the setup process differs depending on the communication level you are configuring, some tasks are performed for more than one level. The following table identifies all setup tasks in the order in which they are performed and which communication level(s) require them. Use the table to determine which tasks you need to perform to set up the required communication level(s).

### Setup Tasks

Record Transfers	MUSE Web	HIS Orders	Tasks
	√	√	<a href="#">“Adding the User to the MUSE WEB Users Group” on page 50</a> .
	√	√	<a href="#">“Creating a MUSE User” on page 51</a> .
√	√	√	<a href="#">“Setting Up the Hardware Profiles” on page 53</a> .
√	√	√	<a href="#">“Verifying Network Configuration” on page 54</a> .
	√	√	<a href="#">“Renaming the User Account on the CASE” on page 55</a>
	√	√	<a href="#">“Configuring Auto Login—CASE 8000 Systems Only” on page 56</a> .
	√	√	<a href="#">“Confirming Internet Explorer Executable Path” on page 57</a> .
√	√		<a href="#">“Configuring CASE Reports on the MUSE File Server” on page 58</a> .
√			<a href="#">“Configuring the CASE System” on page 61</a> .
	√	√	<a href="#">“Enabling Data Requests on the CASE System” on page 63</a> .

In addition, at the beginning of each task, a table (as shown below) indicates the tasks to perform for each communication level(s). If the communication level you are setting up is checked, you need to perform the task. If the communication level you are setting up is not checked, skip the task.

Record Transfer	√
MUSE Web	√
HIS Orders	√



## Adding the Exercise Stress Option to the MUSE System

Use the following procedure to add the exercise stress option to the MUSE system.

1. Log on to the MUSE application server as an administrator.
2. Access the **MUSE v8.x** entry in the **Installed Programs** list.
  - In Windows 2003: Click **Start > Control Panel** and select **Add or Remove Programs**.
  - In Windows 2008: Click **Start > Control Panel > Classic View > Programs and Features**.
3. Select **MUSE 8.x** and click **Change**.  
The **Welcome** window opens.
4. Choose **Modify** and click **Next**.  
The **Select Feature** window opens.
5. Continue to click **Next** on each window until you reach the **Choose MUSE Options** window.
6. Verify that **Exercise Testing Data Storage** is checked.  
If it is not, check it now.
7. Click **Next**.  
The **MUSE Serial Number** window opens.
8. If you added the **Exercise Testing Data Storage** option in the previous step, you need to enter the **Options Configuration Password**.  
If you do not know the password, contact GE Healthcare Technical Support.
9. Click **Next** until your changes are applied and the **Maintenance Complete** window opens.
10. Click **Finish**.

## MUSE User and Shared Acquisition Folder

The MUSE v8.x InstallShield completes the following actions when MUSE is first installed. However, if you are adding CASE to MUSE communication after the MUSE application is installed, you must configure the CASE/Cardiosoft connectivity as follows:

If you deselect **Create Local User and Setup ACQ Share**, the share for the folder **<MuseDBPath>\ACQ** is removed if it already existed.

If you selected MUSE Web earlier to install it, the **Create MUSE Web User for CASE Access** check box, and **User Name** and **Password** fields for the **Web User for CASE** are enabled.

If you select <b>Create Local User and Setup ACQ Share</b> :	If you check <b>Create MUSE Web User for Access</b> :
<ul style="list-style-type: none"> <li>The <b>MUSE ACQ Users</b> group is added to the MUSE server.</li> <li>If a local CASE user is specified in the <b>User Name</b> field: <ul style="list-style-type: none"> <li>The user is added to the <b>MUSE ACQ Users</b> group, if it already exists.</li> <li>If the local user does not exist, it is created and added to the <b>MUSE ACQ Users</b> group.</li> </ul> </li> <li>If a domain CASE user is specified in the <b>User Name</b> field, the user is added to the <b>MUSE ACQ Users</b> group (validation for the credentials are supplied for the domain user on the CASE screen).</li> <li>The <b>&lt;MuseDBPath&gt;\ACQ</b> folder is shared with the name provided in the <b>Share Name</b> field.</li> </ul>	<ul style="list-style-type: none"> <li>If a local user is specified in the <b>User Name</b> field: <ul style="list-style-type: none"> <li>The user is added to the <b>MUSE Web Users</b> group.</li> <li>If the local user does not exist, then it is created and added to the <b>MUSE Web Users</b> group.</li> </ul> </li> <li>If a domain user is specified in the <b>User Name</b> field, it is added to the <b>MUSE Web Users</b> group (validation for the credentials is supplied for the domain user at the CASE screen).</li> </ul> <p><b>NOTE:</b> The <b>MUSE Web Users</b> group is created when you chose to install the MUSE Web feature. Therefore, the <b>Web User for CASE</b> is added directly to the group.</p>

## Adding the User to the MUSE WEB Users Group

### Add User to MUSE Web Users Group

Record Transfer	
MUSE Web	√
HIS Orders	√

To access MUSE reports through MUSE Web, you must add the **case8000** user to the MUSE WEB Users group on the application server. If CASE to MUSE was configured during the initial MUSE installation, this may already be done.

**NOTE:**

You must have the MUSE Web application installed before proceeding with this step. Refer to [Chapter 4 “MUSE Web \(Enterprise Integration\) Installation” on page 39](#) for instructions on installing MUSE Web.

1. Log on to the MUSE application server as a user with administrator's rights.
2. Select **Start > Administrative Tools > Computer Management**.
3. On the **Computer Management** window, select **System Tools > Local Users and Groups > Groups**.  
A list of available groups is in the right window pane.
4. Double-click the **MUSE WEB Users group**.  
The **MUSE WEB Users Properties** window opens.
5. On the **General** tab, click **Add...**  
The **Select Users, Computers, or Groups** window opens.
6. In the **Enter object names to select** field, type **case8000** and click **OK**.  
The **case8000 user** is added to the group, the window closes, and you return to the **MUSE WEB Users Properties** window.
7. Verify **case8000** is displayed in the **Members** field and click **OK**.  
The **MUSE WEB Users Properties** window closes and you return to the **Computer Management** window.
8. Close the **Computer Management** window.

## Creating a MUSE User

### Create MUSE User

Record Transfer	
MUSE Web	√
HIS Orders	√

To request data from the MUSE system, you must set up a CASE user account on the MUSE application server using the following instructions.

1. Log on to the MUSE application with the **MUSEAdmin Service** account.  
If you do not know the user name or password for this account, contact the system administrator.
2. Select **System > Setup > User**.
3. Select **Actions > New**.
4. Click the **General** link.

5. Create a new user with the following values.

Field	Value
Last Name	8000
First Name	CASE
Windows User Name	<servername>\case8000 <b>NOTE:</b> Replace <b>&lt;servername&gt;</b> with the actual name of the MUSE file server.
Account is Enabled	√
MUSE Password	case!8000

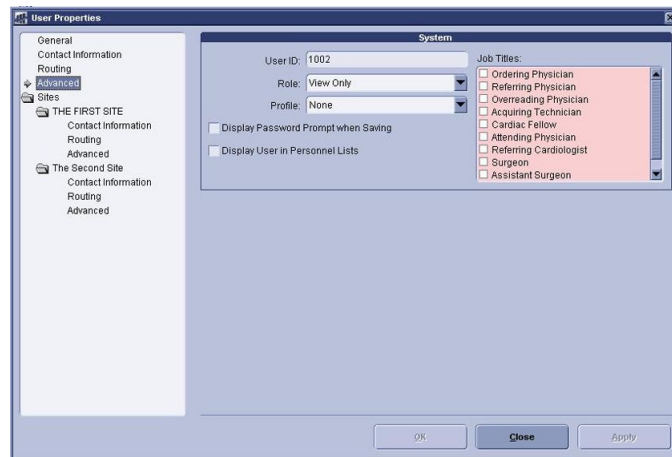
When you are done, the window should look like the following:

6. Select the sites to which the user needs access.

**NOTE:**

The CASE user can request data only for the sites to which the user account is granted access. Therefore, it is important that you select all the sites for which the CASE system may request data.

7. Click the **Advanced** link.  
The following fields are displayed:



8. Enter an available **User ID** for the MUSE system on which you are working.
9. Set the **Role** to **View Only**.
10. Click **OK**.

## Configuring the CASE System Network Settings

For the CASE and MUSE systems to communicate, the CASE system must conform to the networking settings in effect at the installation site. Contact the site's system administrator to obtain required information or to assist in configuring the system.

### NOTE:

Depending on when the MUSE system was set up for any other CASE systems, you may need to change the account and permissions for the **CASE8000** share and any other **CASE\CASE8000's** that are on the same network.

## Setting Up the Hardware Profiles

### Set Up Hardware Profiles

Record Transfer	√
MUSE Web	√
HIS Orders	√

Use the following procedure to ensure that the system uses the CASE system's Network Enabled hardware profile.

1. Log on to the CASE system as an administrator.  
If you do not know the administrator user name and password, contact the system administrator.
2. From the taskbar on the Windows desktop, select **Start > Settings > Control Panel**.

## On Windows XP Systems

1. Double-click **Network Connection**.  
The **Network Connections** window opens.
2. Right-click on the **Local Area Connection**.  
A context menu opens.
3. Ensure the connection is enabled.  
If it is enabled, the first item on the menu is **Disable**. If the first item is **Enable**, click it to activate the connection.

## Verifying Network Configuration

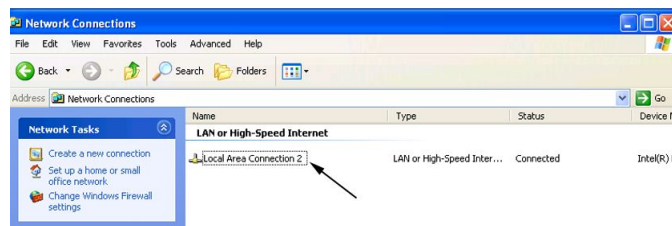
### Verify Network Configuration

Record Transfer	√
MUSE Web	√
HIS Orders	√

The method for verifying the CASE system's network configuration differs depending on whether the system runs on the Windows NT or Windows XP operating system.

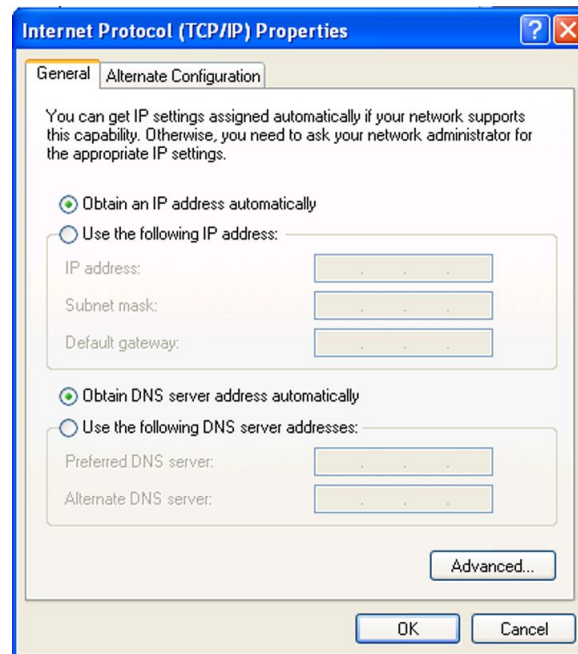
## On Windows XP Systems

1. From the **Control Panel**, double-click **Network Connection**.  
The **Network Connections** folder opens.



2. Double-click on the **Local Area Connection**.  
The **Local Area Connection Status** window opens.
3. Click **Properties**.  
The **Local Area Connection Properties** window opens.

4. Click the **Internet Protocol (TCP/IP)** option and click **Properties**.  
The **Internet Protocol (TCP/IP) Properties** window opens.



5. Do one of the following:
  - To let the DHCP server determine the CASE system's IP address, click **Obtain IP Address Automatically**.
  - To specify the CASE system's IP address, click **Use the Following IP Address** and enter the **<IP address>**, **<subnet mask>**, and **<default gateway>**. (Use this option if you are using the CASE system's **Remote View** option.)
6. Click **OK**.
7. Click **Close**.  
You are prompted to restart the system.
8. Click **Yes**.
9. When the system restarts, log in as an administrator.  
If you do not know the administrator user name and password, contact the system administrator.

## Renaming the User Account on the CASE

### Rename User Account

Record Transfer	
MUSE Web	√
HIS Orders	√

To request data from the MUSE application server, the user logged on to the CASE system must use a **User Name** and **Password** that is valid on the MUSE system. Use the following instructions to rename the **CASE User** account to match the MUSE system's **case8000** user.

### On CASE XP Systems

1. Select **Start > Settings > Control Panel > User Accounts**.
2. Select the **User** account.
3. Select **Properties** and enter **case8000** in the **User Name** field.
4. Click **OK**.
5. Click **Reset Password...**
6. in the **New Password** field, enter **case!8000**.
7. In the **Confirm New Password** field, enter **case!8000**.
8. Click **OK** and close the window.

## Configuring Auto Login—CASE 8000 Systems Only

If you are connecting a CASE 8000 system to the MUSE system, you must configure its auto login option by:

- replacing the old **setuser.exe** file, and
- running the new **setuser.exe** file.

### NOTE:

If you are running any other version of the CASE System, skip this task.

### Replacing the Old setuser.exe File

1. Select **Start > Run... > Browse...**
2. Verify that **c:\** is selected in the **Look in** field.
3. Right-click on **setuser.exe** and select **Delete**.
4. Select **Yes** to confirm the deletion.
5. Insert the diskette labeled **setuser.exe** into the floppy drive.  
If you do not have the diskette, contact Technical Support or download the files from the stress web page.
6. In the **Look in field...** click the drop-down arrow and select **3½ floppy a:**
7. Right-click on **setuser.exe** and select **Copy**.
8. Select **c:\** from the drop-down box in the **Look in field...**
9. Right-click anywhere in the window (except on one of the folders) and select **Paste**.

### Running the New setuser.exe File

1. Double-click **setuser.exe** and select **OK** in the **Run** box.  
The message **Auto login Configured for User** is displayed.
2. Select **OK**.



3. Select **Start > Programs > Marquette > Configure user auto login.**
4. Select **OK** to **configured user auto login.**
5. Select **Start > Shut Down....**
6. Select **Restart** the computer and click **OK.**  
The system AUTOMATICALLY LOGS YOU IN as **case8000 user.**
7. Continue with the task, "Confirming Internet Explorer Executable Path".

## Confirming Internet Explorer Executable Path

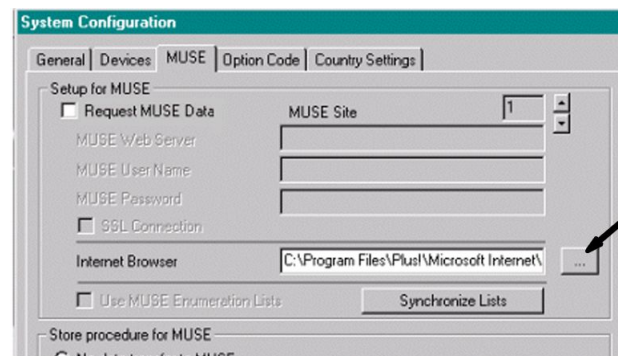
### Internet Explorer Executable Path

Record Transfer	
MUSE Web	√
HIS Orders	√

The CASE application must know the path to the currently installed browser. The path is specified in a dialog box of the GE Healthcare CASE system setup software.

1. From the CASE system's initial window, click **System Configuration.**
2. Click the **MUSE** tab.
3. Click on the button located to the right of the **Internet Browser** field.

A window opens so you can look for the browser's executable file.



4. Browse to the Internet Explorer executable (**lexplore.exe**) and double-click it to select the path.

The path to the browser executable varies with the language installed. See the following list:

### Installed Languages

Language	NT Systems
English	C:\Program Files\Plus!\Microsoft Internet\lexplore.exe
German	C:\Programme\Plus!\Microsoft Internet\lexplore.exe
French	C:\Program Files\Plus!\Microsoft Internet\lexplore.exe

### Installed Languages (cont'd.)

Language	NT Systems
Italian	C:\Programmi\Plus!\Microsoft Internet\lexplore.exe
Spanish	C:\Archivos de programa\Plus!\Microsoft Internet\lexplore.exe
Swedish	C:\Program\Plus!\Microsoft Internet\lexplore.exe
Dutch	C:\Program Files\Plus!\Microsoft Internet\lexplore.exe

5. Click **OK** to save the configuration.
6. Press **Ctrl+Esc**.
7. Select **Shut down**.
8. Chose **Close all programs and log on as a different user**.
9. Click **Yes**.
10. Now log on using the **Case8000** username and password.

## Configuring CASE Reports on the MUSE File Server

### Configure Case Reports

Record Transfer	√
MUSE Web	√
HIS Orders	

In order for the MUSE system to correctly format the CASE reports sent to the MUSE share, the MUSE system, and all connected CASE systems, must use the same report templates. To ensure that all connected systems use the same templates, create them on one CASE system and then copy them to the other CASE systems and to the MUSE system.

Refer to the CASE documentation for instructions on creating the report templates.

#### NOTE:

If you are connecting to a CASE system earlier than version 5.0, the file names of the CASE report templates are not recognized by the MUSE application. Do not proceed with this process. Contact Technical Support for instructions on how to proceed.

## Copying the CASE Report Templates

After creating the templates, use the following instructions to copy them to a floppy disk.

1. Insert a blank formatted 3.5" floppy diskette into the CASE system's floppy drive.
2. Press **Ctrl+Alt+Delete**.
3. Click **Log off**.

4. Hold down the **Shift** key, click **OK**, continuing to hold down the **Shift** key until the **Logon** window opens.
5. When the **Logon** window opens, release the **Shift** key and log on as an administrator.  
If you do not know the administrator user name and password, contact the system administrator.
6. From the desktop, right-click **My Computer** and select **Explore**.
7. Double-click on the **D:** drive.
8. Double-click the **Case** folder and right-click on the **Narrativ** folder.
9. Select **Send To** and click **3½ Floppy (A)**.
10. After the files are copied to the diskette, close all open windows and remove the diskette.
11. Select **Start > Shut Down > Restart**.
12. When the **Logon** window opens, log on using the case8000 user name and password.

## Loading the CASE Templates on the MUSE Application Server

After the templates are copied to the diskette, use the following instructions to import those templates to the MUSE application server.

1. Do one of the following:
  - If the MUSE application server has a floppy disk drive, insert the floppy diskette with the CASE report templates.
  - If MUSE application server does not have a floppy disk drive, copy the files on the diskette to an alternative network location and map a drive to that location on the MUSE application server.
2. On the MUSE desktop, select **Start > Run...**  
The **Run** window opens.
3. Type **cmd** and press **Enter**.  
The **Command Prompt** window opens.
4. Change to the **c:\Program Files\Muse** directory.
5. Type: **loadtemplate <space> -path: <space> "a:\narrativ" <space> -test:4**  
If necessary, modify the command to meet the requirements of your installation. The full command line is: **loadtemplate <space> -path:<path to files>-test:<test type>[-lang:<language ID>][db:<dbname>]**

Refer to the following table for a description of each command option.

### Command Options

Command Option	Description
-path	Required. The path to the CASE report templates. If the MUSE system does not have a floppy drive, use the mapped network drive instead of <b>a:</b> .
-test	Required The CASE system test type. Valid values are: 1 = Resting ECG 3 = HiRes 4 = Stress 5 = Holter
-lang	Optional The report language. If you do not include this switch, the language defaults to <b>en</b> (English). The language you enter should match the language of the CASE system. See the following table for other language codes.
-db	Optional Database Name (for example <b>Server\Instance.Prefix</b> ). The default is <b>\.MUSE</b> .

### Language Codes

Code	Language
da	Danish
de	German
en	English
es	Spanish
fi	Finnish
fr	French
it	Italian
ja	Japanese
nl	Dutch
no	Norwegian
ru	Russian
sv	Swedish

### Language Codes (cont'd.)

Code	Language
zh-chs	Simplified Chinese
Zh-cht	Traditional Chinese

6. Press **Enter**.

The templates are loaded onto the MUSE application server and are ready for use.

## Enabling Data Transfer on the CASE System

### Enable Data Transfer

Record Transfer	√
MUSE Web	
HIS Orders	

To transfer reports from the CASE system to the MUSE system, you must enable the data transfer option on the CASE system and verify that the transfer works.

## Configuring the CASE Location and Cart Number

When the CASE systems transfer reports to the MUSE system, it generates the file name using the CASE system location number and cart number. If you use a single MUSE site number for multiple CASE systems, use the following instructions to set up each CASE system with a different cart number.

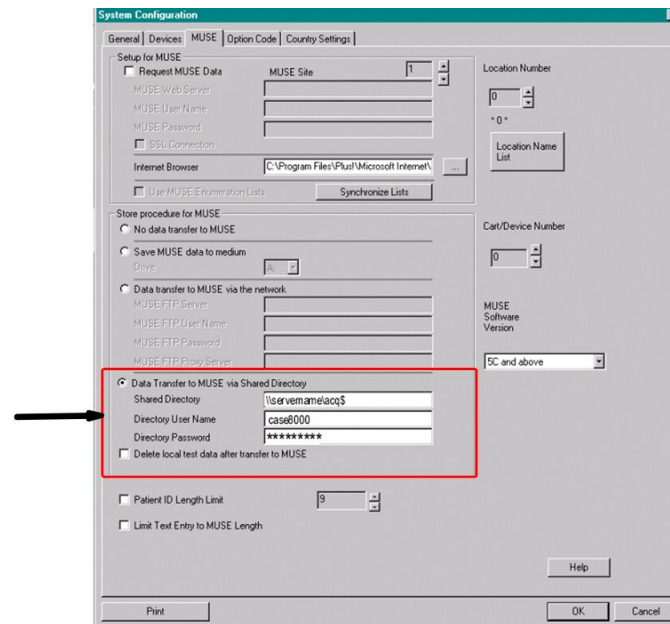
1. In the CASE application, select **System Configuration**.
2. On the **MUSE** tab, enter a unique cart number and click **OK**.

## Configuring the CASE System

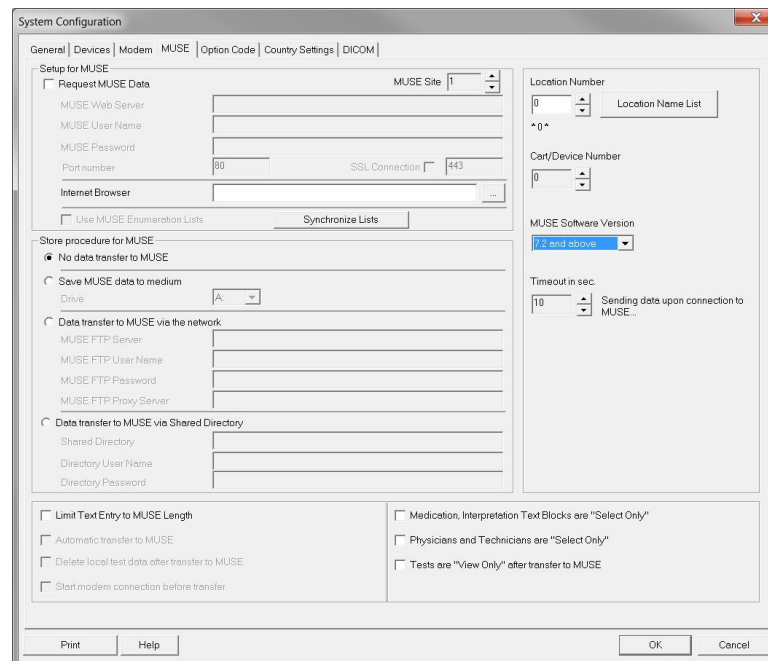
1. In the CASE application, select **System Configuration**.
2. On the **MUSE** tab, select **Data Transfer to MUSE via Shared Directory**.

3. In the **Shared Directory** field, enter the network share in this format:  
**\\<servername>\<acq\$>**.

Where **<servername>** is the name of the MUSE file server and **<acq\$>** is the name of the shared folder.



For CASE v6.51 or earlier



For CASE v6.61 or later

On new systems, the name of the shared folder is **acq\$**.

On systems being upgraded from MUSE 5, the shared folder is **case8000**.

4. In the **Directory User Name** field, enter **case8000**.  
This is the Windows user noted in “MUSE User and Shared Acquisition Folder” on page 49 .
5. In the **Directory Password** field, enter **case!8000**.  
This is the password noted in “MUSE User and Shared Acquisition Folder” on page 49.
6. Click **OK**.

## Verifying Record Transfer

After setting up the MUSE system and all connected CASE systems, use the following procedure to verify that the CASE system transfers reports to the MUSE share and that the MUSE system imports the CASE report.

1. From the initial window of the CASE application, click **Local Database**.
2. Highlight a patient name and click **Select**.  
The **Select Test** window opens.
3. Select a test record and click **Transfer to MUSE**.
4. Click **Save**.
5. Log on to the MUSE system.
6. Verify the test record appears in the MUSE system **Edit List**.  
The CASE system is now ready to transfer reports to the MUSE system and the MUSE system is now ready to accept those reports.

## Enabling Data Requests on the CASE System

### Enable Data Requests

Record Transfer	
MUSE Web	√
HIS Orders	√

Before the CASE system can request reports, patient demographics, and order information from the MUSE application server, you must enable data requests on the CASE system and verify that those requests are successful.

### Enabling Data Requests in the CASE System

1. From the initial window of the CASE application, click **System Configuration**.  
The **System Configuration** window opens.
2. Click the **MUSE** tab.

- Set the **Request MUSE Data** check box, as seen in the following window, to enable the retrieval of patient demographics and orders from a MUSE system.

**System Configuration**

General | Devices | **MUSE** | Option Code | Country Settings

Setup for MUSE

☒ Request MUSE Data MUSE Site 1

MUSE Web Server MUSEXXX001

MUSE User Name Case8000

MUSE Password

☐ SSL Connection

Internet Browser C:\Program Files\Plus\Microsoft Internet\

☐ Use MUSE Enumeration Lists Synchronize Lists

Store procedure for MUSE

☐ No data transfer to MUSE

☐ Save MUSE data to medium

Drive A:

☒ Data transfer to MUSE via the network

MUSE FTP Server MUSEXXX001

MUSE FTP User Name anonymous

MUSE FTP Password

MUSE FTP Proxy Server

☐ Data Transfer to MUSE via Shared Directory

Shared Directory

Directory User Name

Directory Password

☐ Delete local test data after transfer to MUSE

For CASE v6.51 and earlier

**System Configuration**

General | Devices | Modem | **MUSE** | Option Code | Country Settings | DICOM

Setup for MUSE

☐ Request MUSE Data MUSE Site 1

MUSE Web Server

MUSE User Name

MUSE Password

Port number 80 SSL Connection ☐ 443

Internet Browser

☐ Use MUSE Enumeration Lists Synchronize Lists

Store procedure for MUSE

☒ No data transfer to MUSE

☐ Save MUSE data to medium

Drive A:

☐ Data transfer to MUSE via the network

MUSE FTP Server

MUSE FTP User Name

MUSE FTP Password

MUSE FTP Proxy Server

☐ Data transfer to MUSE via Shared Directory

Shared Directory

Directory User Name

Directory Password

Location Number 0 Location Name List

Card/Device Number 0

MUSE Software Version 7.2 and above

Timeout in sec. 10 Sending data upon connection to MUSE

☐ Limit Text Entry to MUSE Length

☐ Automatic transfer to MUSE

☐ Delete local test data after transfer to MUSE

☐ Start modem connection before transfer

☐ Medication, Interpretation Text Blocks are "Select Only"

☐ Physicians and Technicians are "Select Only"

☐ Tests are "View Only" after transfer to MUSE

Print Help OK Cancel

For CASE v6.61 and later

- Click the arrow buttons to the right of the **MUSE Site** field to select the correct **MUSE site number**.



- Enter the following information:

#### System Configuration, MUSE Tab

Field	Value
MUSE Web Server:	<Name or IP address of the MUSE file server>
MUSE User Name:	case8000
MUSE Password:	case!8000

The **MUSE User Name** and **MUSE Password** are used when:

- The application requests previous studies, patient demographics, or order data.
- You click on the **MUSE Browser** icon from the CASE system opening window.

- Click **OK**.

#### Verifying Requests for Data

- From the initial CASE system window, click **MUSE Browser**.

The CASE system launches the **Microsoft Internet Explorer** and connects to the MUSE home page. If you are using the default configuration, you are prompted to enter a user name and password.

- Enter the username and password.

#### NOTE:

If you change the default password for the case8000 account on the CASE system, you must also change it on the MUSE system.

- Submit a request query and view the results to verify that the Web connection functions properly.

#### Verifying the Retrieval of Patient Demographics

- From the initial CASE system window, click **New Test**.

A list of available patients is displayed.

- Verify that the patient list is from the MUSE system database and not the local CASE database.



# MARS to MUSE Communication

This chapter describes how to configure MARS systems to send Holter data to MUSE systems running version 8.0.

MARS to MUSE communication allows you to transfer stored MARS reports from the MARS system to the MUSE system for viewing, editing, printing, and storage. The MARS system transfers the complete Holter report. At the MUSE system, you can view the strip pages and edit patient demographics, diagnosis statements, and findings. If you use the MARS Print Formatter application, you can print the entire report in the MARS system format to a PostScript or PCL printer on the MUSE system.

**NOTE:**

If you print the Holter report to a non-PostScript or non-PCL printer, and the MARS to MUSE print formatter is not installed, you can only print the Cover/Summary page, demographics, and strip pages.

Adding or deleting a MARS workstation to the MUSE system using the MUSE InstallShield AUTOMATICALLY RESTARTS the MUSE services. Before starting this procedure, advise the customer that the MUSE system will shut down for a brief time while the change is applied.

Adding MARS to MUSE communication requires changes to both the MARS workstation and the MUSE application server and includes:

- Verifying the MARS software version
- Recording the IP address or host name of the MARS workstation
- Installing the Holter Data Storage Option and adding MARS workstations to the MUSE database
- Installing the MARS Print Formatter on the MUSE system
- Combining and copying the site.ini files
- Checking out the installation

## Theory of Operation

To understand how the MARS to MUSE communication work, you need to familiarize yourself with the MUSE services that are used, the process for acquiring data, and the process for printing reports.

## MUSE Services Explained

MARS to MUSE communication makes use of the following two services:

- MUSE Generacq Service**  
 The MUSE Generacq Service handles acquisition from other systems or devices. In MARS to MUSE communication, it does the following:
  - Searches the reports share on the MARS system for stored reports (files with the **\*.mrs** file extension)
  - Pulls the reports to the MUSE system for processing.
- MUSE Formatter Service**  
 The MUSE Formatter Service launches the MARS formatter program. The MARS formatter program handles formatting output to match the format from the MARS system.

## Acquisition Flow Chart

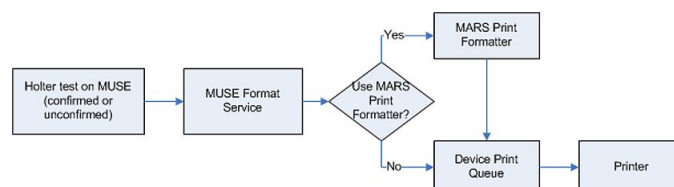
A Holter test is stored in the reports folder on the MARS system with a **.mrs** extension. The MUSE Generacq service searches that folder for **\*.mrs** files.

Tests are then normalized on the MUSE system and stored in the database as either unconfirmed or confirmed tests, depending on the configuration of the MUSE system.



## Printing Flow Chart

A print request is made for a Holter test. The MUSE Format service either formats the test or hands it off to the MARS Print Formatter, depending on the configuration.



## Checking the MARS Software Version

To determine your MARS software version:

1. From the MARS system menu bar, select **Help > About**.  
The **About** window opens.
2. Record the software version listed on the **About** window.  
MARS version \_\_\_\_\_
3. Compare the version to the following table to determine your next step.

If the current MARS version is...	then...
5.10	Upgrade to version 6.0 or later.
6.0 or higher	Continue the MARS to MUSE installation. Go to <a href="#">“Setting Up the MARS Server or Stand-alone System” on page 69</a>

## Setting Up the MARS Server or Stand-alone System

### NOTE:

Before proceeding, make sure you are running MARS software version 6.0 or higher.

### NOTE:

It is not necessary to set up MARS clients for MARS to MUSE communication, but you must enable the MARS to MUSE option on all clients (if this option is desired).

Complete all MARS to MUSE setup on the server or stand-alone systems.

1. At the login prompt, log in with the Administrator account.
2. Record the computer name \_\_\_\_\_.

## Verifying the Drive Share

1. Open **Windows Explorer**.
2. Right-click on the **<drive>: \gemsit\reports folder**.
3. Click on **Sharing...**
4. Verify that the folder is shared.
5. Verify **Share name** is **Reports**.
6. Open **Permissions**.
7. Verify that the user running the MUSE services has **Full Control**.  
Typically, this is the default **MUSEBkgnd** account. However, for security reasons the customer may have elected to use a different account.
8. Give this account full permissions to the **\gemsit\reports** folder shared in step 2.  
If necessary, create an identical user account locally on the MARS system. Use the same password.

## Activating the MARS to MUSE Software

1. Locate the MARS software activator sheet.
2. From the MARS application menu bar, select **System > System Setup > Software Activator Setup**.  
A list of task names opens along with their corresponding modes.
3. If the MARS to MUSE task name is disabled, click **MARS to MUSE**. A list of available modes displays in the **Change Mode To** list box.
4. Click **Activate**.
5. Type the access code from the activator sheet in the **Enter Activator Code Here** text entry box.
6. Click **Save Changes**. If the code is incorrect or incomplete, an error message is displayed.
7. Select **OK**.
8. Click **Quit** to close the window.
9. Repeat step 2 through step 8 on all systems requiring MARS to MUSE communication.

## Setting Up the Site Information

Site setup is necessary to transfer Holter data to a MUSE system. The sites and locations entered in each MARS system must match the sites and location used on the MUSE systems.

**NOTE:**

Contact the MUSE system owner for the site and location information you need to use for the MARS system.

Repeat the following steps for each MARS system that is communicating with the MUSE system.

1. From the MARS main window, select **System > System Setup > Site**.  
The **System: Site and Locations Setup** window opens.
2. Select the appropriate **Site #**.
3. Enter the corresponding **Site Name**.

**NOTE:**

The **Site #** and **Site Name** must match exactly those on the MUSE system.

4. Select the appropriate **Location #**.
5. Enter the corresponding **Location Name**.

**NOTE:**

The **Location #** and **Location Name** must match exactly those on the MUSE system.

6. Click **Add**.
7. Repeat steps 2 through 6 as necessary.

8. When you receive a message indicating successful completion of the site setup changes, click **OK**.
9. Save the changes.

## Setting Up the MUSE Application Server

Setting up the MUSE application server consists of the following tasks:

1. Adding entries to the MUSE Generacq Service
2. Modifying the **Lmhosts** file
3. Installing the MARS print formatter
4. Combining and copying the **site.ini** files
5. Restarting the MUSE services

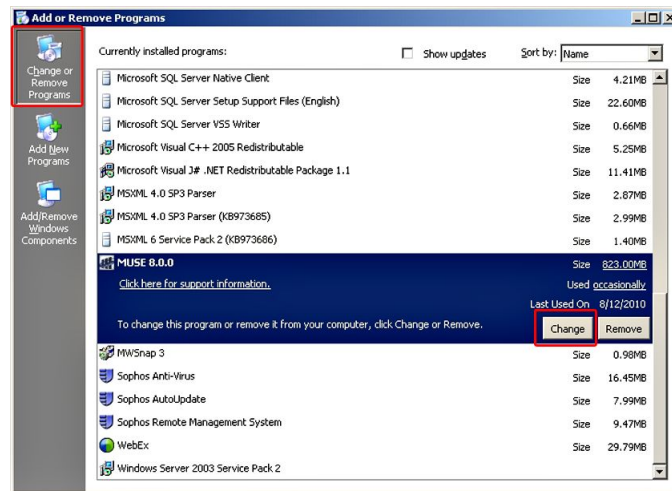
The following sections describes each of these tasks.

## Adding MARS Workstations to the MUSE Database

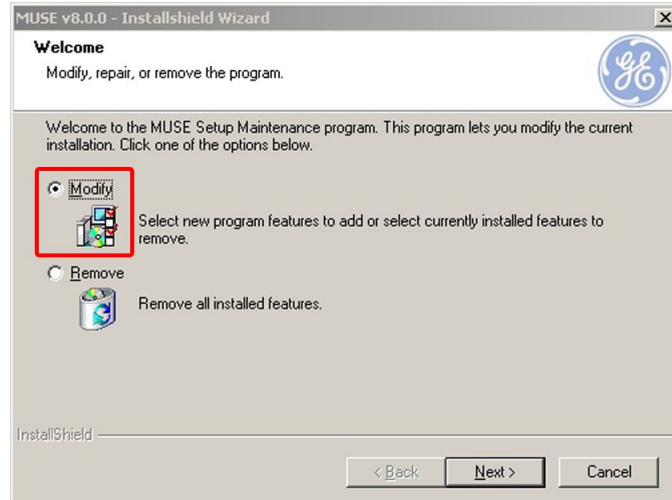
To ensure that the MUSE system can locate and communicate with the MARS workstation, use the following procedure to add the path of each MARS workstation

to the MUSE database. If the workstation was installed during the initial MUSE installation, this may already be done.

1. Open the **Control Panel** and select **Add or Remove Programs**.  
The **Add or Remove Programs** window opens.



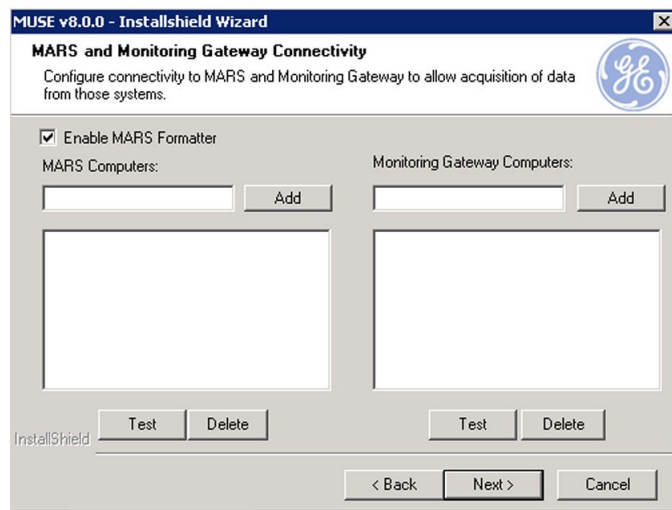
2. Select the **MUSE 8.0.0** entry and click **Change**.  
The **Welcome** window opens.



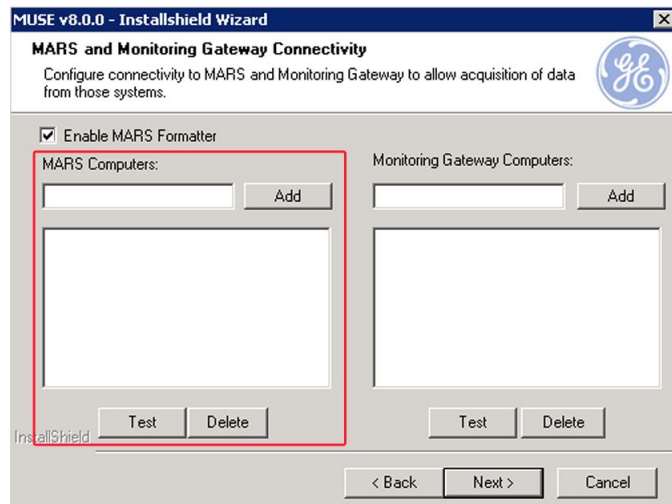
3. Select **Modify** and click **Next**.



4. Continue to click **Next** on each window until you reach the **MARS and Monitoring Gateway connectivity** window.



5. If the **Enable MARS Formatter** option is not checked, select the check box to enable the option.  
This option should always be checked.
6. Enter the **name of the computer** or the **IP Address** of the MARS workstation(s) in the **MARS Computers** side of the window.



7. Click **Add**.  
This adds the workstation to the system.
8. Click **Test**.  
This tests that the MUSE server and MARS workstation can communicate over the network and displays the test results.

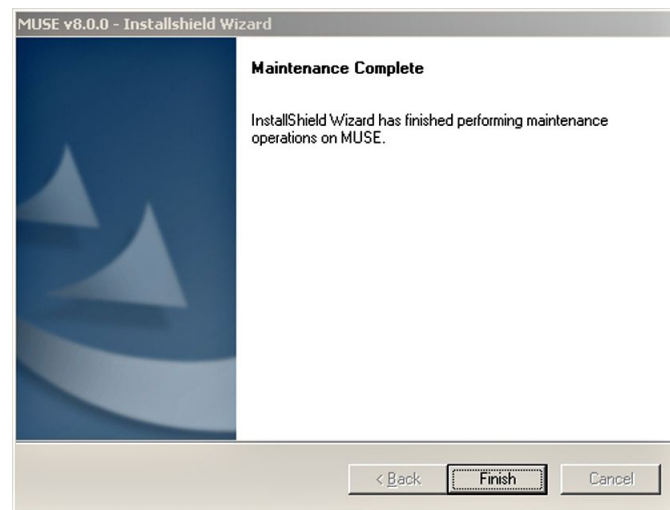
If the test fails, you can continue with the installation, but you need to establish a network communication between the MUSE server and the MARS workstation before the MUSE system can acquire Holter reports.

**NOTE:**

The test only attempts to **ping** the MARS workstation. It does not verify the **report** folder share permissions on the MARS workstation.

9. Click **Next**.

The **Maintenance Complete** window opens.



10. Click **Finish**.

## Installing Holter Data Storage and Adding MARS Workstations to MUSE Database

To ensure that the MUSE system can locate and communicate with the MARS workstation, run the MUSE InstallShield in modify mode to install the Holter Data Storage option and add the path of each MARS workstation to the MUSE database.

This may have already been done during the initial MUSE installation.

1. Log on to the MUSE application server as an administrator.
2. Access the **MUSE v8.x** entry in the **Installed Programs** list.
  - In Windows 2003: Click **Start > Control Panel** and select **Add or Remove Programs**.
  - In Windows 2008: Click **Start > Control Panel > Classic View > Programs and Features**.
3. Select **MUSE 8.x** and click **Change**.  
The **Welcome** window opens.
4. Choose **Modify** and click **Next**.  
The **Select Feature** window opens.

5. Continue to click **Next** on each window until you reach the **Choose MUSE Options** window.
6. Verify that **Holter Data Storage** is checked and click **Next**.  
If it is not checked, check it now.  
The **MUSE Serial Number** window opens.
7. If you added the **Holter Data Storage Option** in the previous step, you need to enter the **Options Configuration Password**.  
If you do not know the password, contact GE Healthcare Technical Support.
8. Click **Next**.  
The **MARS and Monitoring Gateway Connectivity** window opens.
9. Enter the name of the computer or the IP address of the MARS workstation in the **MARS Gateway Computer** side of the window.
10. Click **Add**.  
This adds the item to the system.
11. Click **Test**.  
This tests that the MUSE server and MARS workstation can communicate over the network and displays if the test was successful.  
If the test fails, you can continue with the installation, but you need to establish network communication between the MARS workstation and MUSE system before the MARS workstation can send reports to the MUSE system.  
**NOTE:**  
The test only attempts to **ping** the MARS workstation. It does not verify the report folder share permissions on the MARS workstation. If the **ping** test fails when using the host name of the MARS workstation, refer to [“Creating or Modifying the Lmhosts File”](#).
12. Click **Next**.  
The **Maintenance Complete** window opens.
13. Click **Finish**.  
If you do not receive the message that MUSE services are restarting, you need to restart the **MUSE Generacq** service manually.

## Creating or Modifying the Lmhosts File

The **Lmhosts** file associates the IP address of each MARS workstation to that workstation’s computer name and allows the MUSE application server to communicate with the workstation through the computer name instead of the IP address.

1. From the MUSE application server, determine if you can ping the MARS workstations using the following steps:
  - a. Open a **Command Prompt** window.
  - b. Type **ping <space> <MARS computer name>** and press **Enter**.
2. Do one of the following:
  - If the ping is successful, you do not need to create or modify the **Lmhosts** file. Continue to [“Installing the MARS Print Formatter” on page 76](#)

- If the ping is unsuccessful, continue to step 3.
3. In **Windows Explorer**, navigate to: **c:\windows\system32\drivers\etc\**.
  4. Do one of the following:
    - If the file **Lmhosts** exists, open it in Notepad.
    - If the file **Lmhosts** does not exist, open a new file in Notepad.
  5. In Notepad, add a line for each MARS system in this format:  
**xxx.xxx.xxx.xxx <space> <MARS computer name> <space> #PRE**  
 Where **xxx.xxx.xxx.xxx** is the IP address of the MARS client and is the workstation's computer name.
  6. Save the file.  
 If you modified an existing file in step 4, it is saved over the original file.  
 If you created a new file in step 4, save the file as **Lmhosts** in **c:\windows\system32\drivers\etc\**.
  7. If necessary, enable **Lmhosts** lookup on the **WINS** tab of the advanced TCP/IP properties.  
**Lmhost lookup** is enabled by default on **Windows Server 2003 and 2008..**
  8. Reload the remote cache name table using the following steps:
    - a. Open a **Command Prompt** window.
    - b. Type **nbtstat -R**.
    - c. Press **Enter**.
  9. Use the following steps to verify that you can ping the MARS system(s) by name:
    - a. Open a **Command Prompt** window.
    - b. Type **ping <space> <MARS computer name>** and press **Enter**.

## Installing the MARS Print Formatter

The MARS Print Formatter allows Holter reports that are printed from the MUSE system to look the same as when they are printed from the MARS system. If the print formatter is not installed, reports printed from the MUSE system include only text and strips.

### NOTE:

The MARS formatter is backward compatible with earlier versions of MARS v6 and v7. However, the formatter is not forward compatible. If you install the MARS 7 formatter on a MUSE system and the MUSE system is acquiring Holter tests from a MARS v8 system, you may experience problems printing the Holter report.

1. Log on to the MUSE application server as an administrator.
2. Insert the MARS Print Formatter CD.

The print formatter installation AUTOMATICALLY BEGINS TO RUN. If it does not start automatically, run **setup.exe** on the installation CD to start the installer.

- Follow the prompts until the installation is completed.

The installer creates a **c:\lgemsit** folder.

- Click **Test**.

This tests that the MUSE server and MARS workstation can communicate over the network and displays the test results. If the test fails, you can continue with the installation, but you need to establish network communication between the MUSE server and the MARS workstation before the MUSE system can acquire Holter reports.

**NOTE:**

The test only attempts to **ping** the MARS workstation. It does not verify the **reports** folder share permissions.

## Combining and Copying the site.ini Files

Use the following instructions to combine the **site.ini** files from the MARS system and then copy them to the MUSE system.

- Combine the **site.ini** files from each of the MARS systems into a merged **site.ini** file.

### site.ini File Basics

Description	Example
There are a minimum of three entries for a <b>site.ini</b> file. The first entry (two lines) lists the site number or numbers. It has at least one entry in the "Site Numbers" row.	[Site List] Site Numbers= 5
The second entry (two lines) lists the location number or numbers. It also has at least one entry. In this example we have two locations. It also has the name of the site under "Site Name"	[Site 5] Location Numbers= 10 11 Site Name="Memorial Hospital"
The third entry (each entry is two lines) gives the "Location Name" for a specific Site/Location combination.	[Site 5 Location 10] Location Name= "Holter Scanning" [Site 5 Location 11] Location Name= "Emergency Department"

Following is an example of a combined **site.ini** file:

```
File from Site #1
[Site List]
Site Numbers= 1
[Site 1]
Location Numbers= 1 2
Site Name= "Memorial Hospital"
[Site 1 Location 1]
Location Name= "Holter Scanning"
[Site 1 Location 2]
Location Name= "ECG Department"

File from Site #2
[Site List]
```

```

Site Numbers= 2
[Site 2]
Location Numbers= 1 2
Site Name= "General Hospital"
[Site 2 Location 1]
Location Name= "Mary's Office"
[Site 2 Location 2]
Location Name= "John's Office"

Merged File
[Site List]
Site Numbers= 1 2
[Site 1]
Location Numbers= 1 2
Site Name= "Memorial Hospital "
[Site 1 Location 1]
Location Name= "Holter Scanning"
[Site 1 Location 2]
Location Name= "ECG Department"
[Site 2]
Location Numbers= 1 2
Site Name= "General Hospital"
[Site 2 Location 1]
Location Name= "Mary's Office"
[Site 2 Location 2]
Location Name= "John's Office"

```

2. Copy the merged **site.ini** file to the MUSE system via the network or floppy disk:

**NOTE:**

Make sure that all the MARS systems (client, server, or standalone) are configured with their site and location information before copying the **site.ini** file to the MUSE system.

3. Copy the file from the MARS server (or standalone system): **<drive>:\gemsit\var\marsnt\system\site.ini** to the MUSE location: **c:\gemsit\var\marsnt\system\site.ini**

## Restarting the MUSE Services

Before continuing with the MARS to MUSE communication checkout, you must stop and restart the following MUSE services:

- The MUSE Generacq Service
- The MUSE Format Service

## Checkout Procedure

To ensure that the MARS to MUSE communication is functioning properly, you need to save a report on each MARS workstation, send those reports to the MUSE application server, and then retrieve and print those reports on the MUSE server.

## Saving a Report on the MARS System

1. Click on the **Patient Select** icon.
2. Click on a patient with a status of **Ready to Edit**.
3. Make sure that the **Site** and **Location** information is filled in for this patient.
4. Click on the **Report Review** icon.
5. Click **Save Report**.  
The following message is displayed: **Report successfully stored**.
6. Click **OK**.
7. Click **Close**.  
The **Report Review** tool closes.

## Sending Holter Data to the MUSE System

1. Click on the **Patient Select** icon.
2. Verify the selected patient's status changed to **Reviewed**.
3. In the **Patient Select** window, select **Stored Reports** from the **Data Type** list.
4. Click **Tools**.
5. Click **Store to MUSE**.  
The following message is displayed: **You have selected 1 file(s) for MUSE storage. Are you sure you want to store the selected file(s) to MUSE?**
6. Click **Yes**.  
Another window opens.
7. Click **OK**.
8. After a brief delay, verify that the report is listed as **Stored to MUSE**.  
**NOTE:**  
If the **Delete Report** option is selected at the MARS, the patient report is deleted from the list.
9. Click **Close**.

## Printing Holter Data from the MUSE System

1. Select the **Holter** report from the **MUSE Edit** List.
2. Click **Print Test** on the tool bar.
3. Select a **PostScript** or **PCL** printer from the **Available Printers** list.
4. Click **OK**.
5. Verify the report prints and that it is formatted properly based on the configuration:
  - If the formatter is installed, the report should look like a MARS report.
  - If the formatter is not installed, the report should look like a MUSE report.

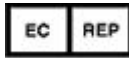








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