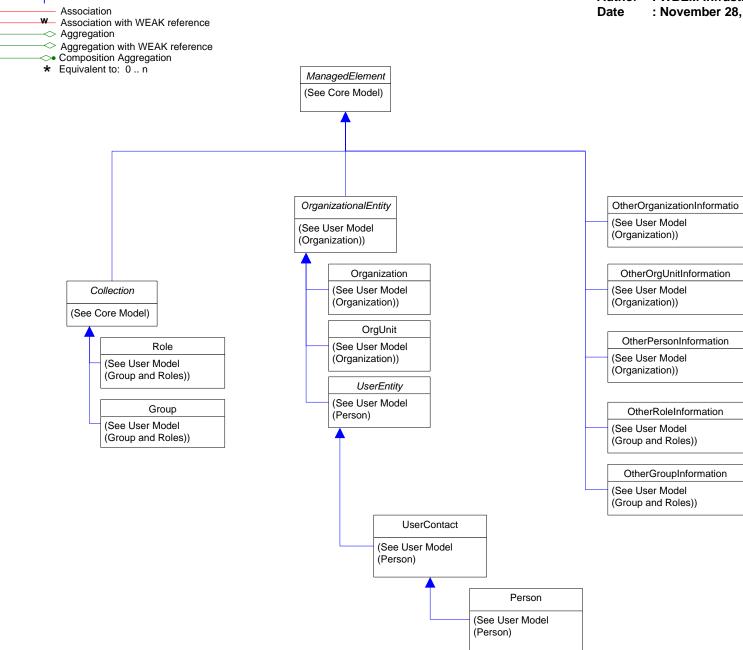
Page 1-34: Overview User

Inheritance

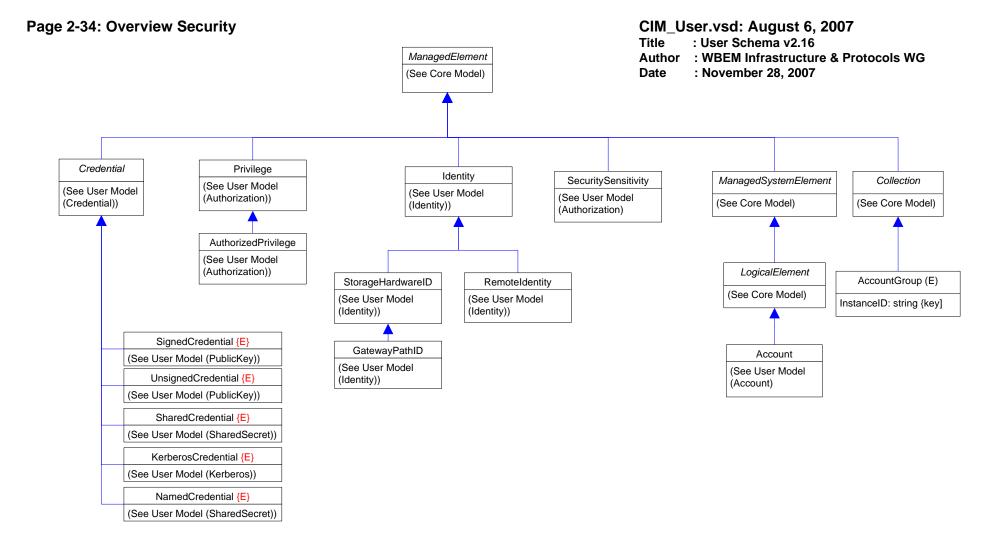


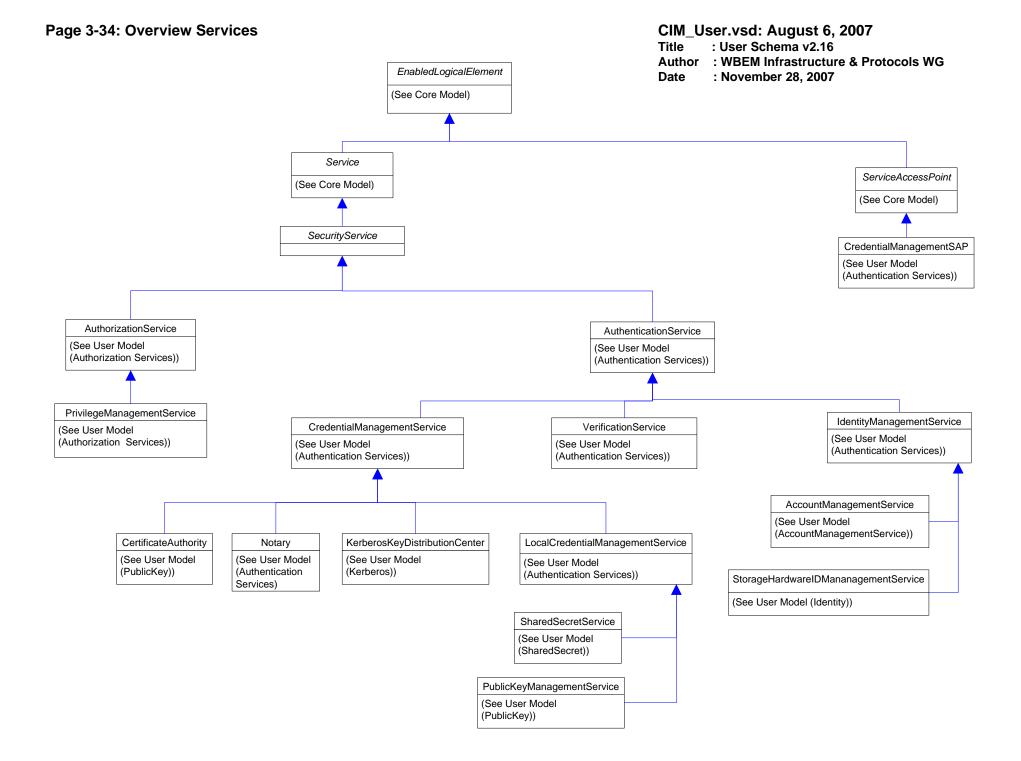
CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author: WBEM Infrastructure & Protocols WG

: November 28, 2007



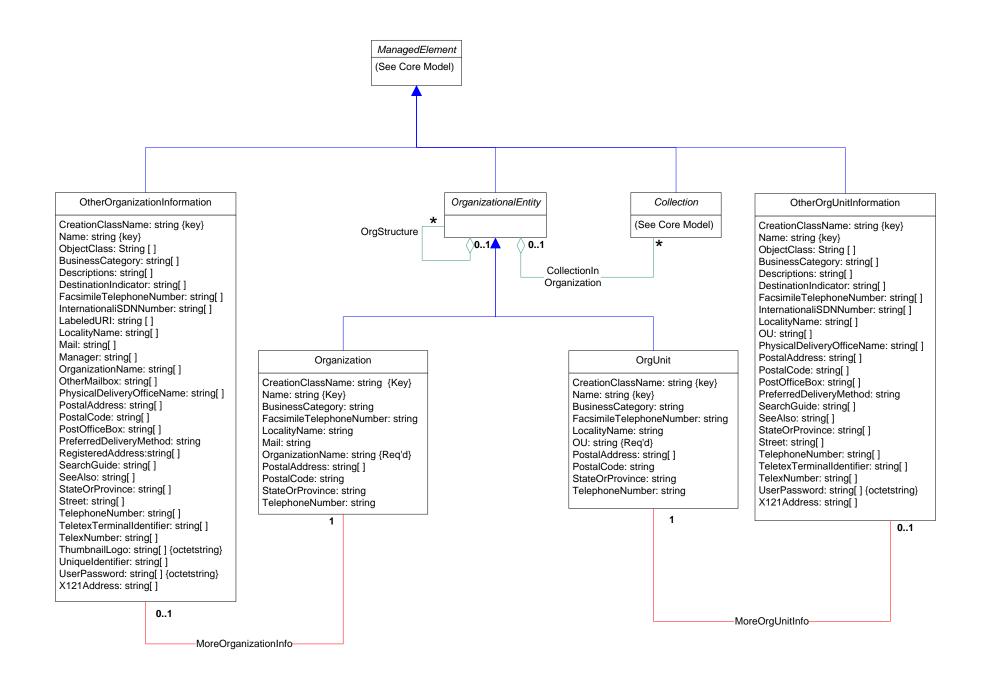


Page 4-34: Organization

CIM_User.vsd: August 6, 2007

Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG



Author : WBEM Infrastructure & Protocols WG Date : November 28, 2007 ManagedElement (See Core Model) 0..1 Collection OrganizationalEntity OrgStructure (See Core Model) * * 0..1 CollectionInOrganization UserEntity UserContact OtherPersonInformation CreationClassName: string {key} CreationClassName: string {key} * ManagedSystemElement Name: string {key} Name: string {key} OU: string[] ObjectClass: String [] GivenName: string Pager: string[] (See Core Model) Surname: string {Req'd} Audio: string[] {octetstring} PersonalTitle: string[1] Mail:string BusinessCategory: string[] Photo: string[] {octetstring} UserID: string CarLicense: string[1 PhysicalDeliveryOfficeName: string[] LogicalElement LocalityName: string CommonName: string[] PostalAddress: string[] PostalAddress: string[] CountryName: string[] PostalCode: string[] (See Core Model) StateOrProvince: string DepartmentNumber: string[] PostOfficeBox: string[] PostalCode: string Descriptions: string[1 PreferredDeliveryMethod: string TelephoneNumber: string DestinationIndicator: string[] PreferredLanguage: string EnabledLogicalElement DisplayName: string[] RegisteredAddress: string[] EmployeeNumber: string RoomNumber: string[] (See Core Model) EmployeeType: string[1] Secretary: string[] FacsimileTelephoneNumber: string[] SeeAlso: string[] GenerationQualifier:string[] StateOrProvince: string[] System GivenName: string[] Street: string[] 0..1 HomeFax: string[] Surname: string[] Person (See Core Model) HomePhone: string[] TelephoneNumber: string[] HomePostalAddress: string[] TeletexTerminalIdentifier: string[] BusinessCategory: string CollectionIn Initials: string[] TelexNumber: string[] CommonName: string {Reg'd} System SystemAdministrator InternationaliSDNNumber: string[] ThumbnailLogo: string[] {octetstring} EmployeeNumber: string JpegPhoto: string[] {octetstring} ThumbnailPhoto: string[] {octetstring} EmployeeType: string LabeledURI: string[] Title: string[] FacsimileTelephoneNumber: string LocalityName: string[] UserID: string[1 HomePhone: string Mail:string[] HomePostalAddress: string[] UniqueIdentifier: string[] Manager: string[] UserCertificate: string[] {octetstring} JpegPhoto: uint8[] {octetstring} MiddleName: string[] UserPassword: string[] {octetstring} Manager: string Mobile: string[] UserPKCS12: string[] {octetstring} Mobile: string OrganizationName: string[] UserSMIMECertificate: string[] {octetstring} OU: string OrganizationalStatus: string[] X121Address: string[] Pager: string OtherMailbox: string[] X500UniqueIdentifier: string[] {octetstring} PreferredLanguage: string Secretary: string Title: string 0..1

CIM_User.vsd: August 6, 2007

: User Schema v2.16

Title

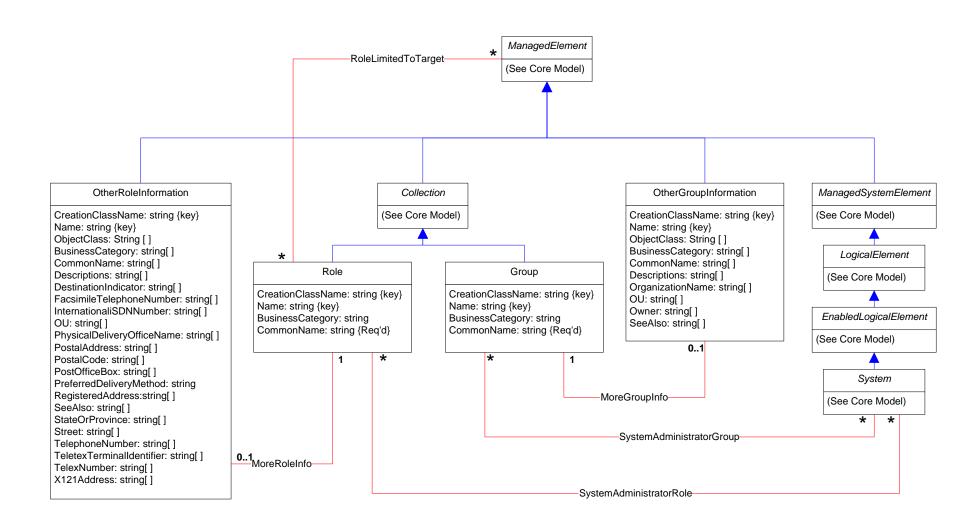
MorePersonInfo-

Page 6-34: Group & Role

CIM_User.vsd: August 6, 2007

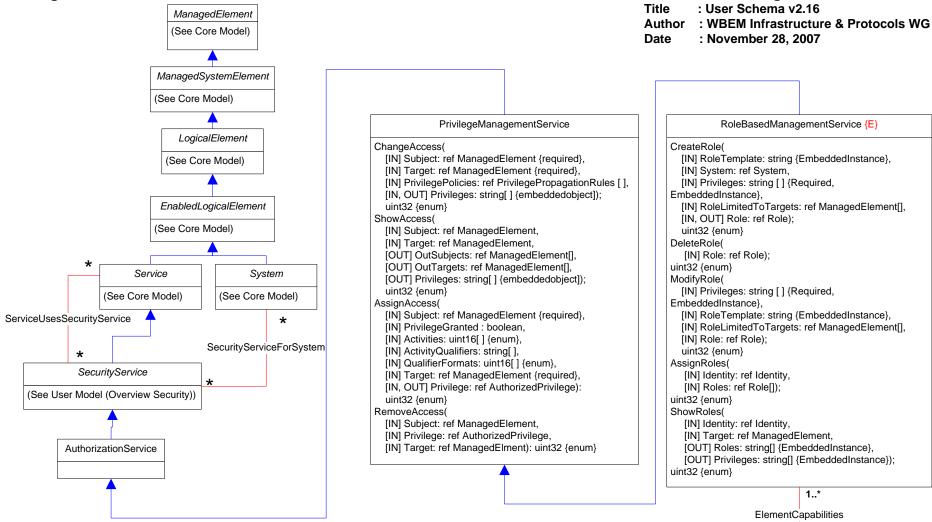
Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG



Page 7-34: Authentication Services CIM_User.vsd: August 6, 2007 Title : User Schema v2.16 Author : WBEM Infrastructure & Protocols WG ManagedElement Date : November 28, 2007 (See Core Model) ManagedSystemElement (See Core Model) LogicalElement (See Core Model) EnabledLogicalElement (See Core Model) ServiceAccessPoint Service System (See Core Model) (See Core Model) (See Core Model) * CredentialManagementSAP SecurityService -ServiceUsesSecurityService-**URL**: string (See User Model (Overview Security)) -SecurityServiceForSystem-AuthenticationService AccountManagementService (See User Model (Account)) 0..1 Trust StorageHardwareIDMananagementService VerificationService CredentialManagementService Hierarchy (See User Model (Identity)) CertificateAuthority Notary LocalCredentialManagementService KerberosKeyDistributionCenter (See User Model (See User Model (Kerberos)) Comparitors: uint16[] {enum} (PublicKey)) SealProtocol: string CharterIssued: datetime CharterExpires: datetime PublicKeyManagementService SharedSecretService (See User Model (PublicKey)) (See User Model (SharedSecret))

Page 8-34: Authorization Services



RoleBasedManagementService (E) CreateRole([IN] RoleTemplate: string {EmbeddedInstance}, [IN] System: ref System, [IN] Privileges: string [] {Required, EmbeddedInstance}, [IN] RoleLimitedToTargets: ref ManagedElement[], [IN, OUT] Role: ref Role); uint32 {enum} DeleteRole([IN] Role: ref Role); uint32 {enum} ModifyRole([IN] Privileges: string [] {Required, EmbeddedInstance}, [IN] RoleTemplate: string {EmbeddedInstance}, [IN] RoleLimitedToTargets: ref ManagedElement[], [IN] Role: ref Role); uint32 {enum} AssignRoles([IN] Identity: ref Identity, [IN] Roles: ref Role[]); uint32 {enum} ShowRoles([IN] Identity: ref Identity, [IN] Target: ref ManagedElement, [OUT] Roles: string[] {EmbeddedInstance}, [OUT] Privileges: string[] {EmbeddedInstance}); uint32 {enum} 1..*

CIM_User.vsd: August 6, 2007

: User Schema v2.16

: November 28, 2007

0..1 RoleBasedManagementCapabilties {E}

ElementCapabilities

SupportedMethods: uint16[]

Page 9-34: AccountManagement Services CIM_User.vsd: August 6, 2007 Title : User Schema v2.16 Author: WBEM Infrastructure & Protocols WG ManagedElement Date : November 28, 2007 (See Core Model) ManagedSystemElement (See Core Model) LogicalElement (See Core Model) EnabledLogicalElement (See Core Model) Service System (See Core Model) (See Core Model) * -ServiceUsesSecurityService-SecurityService -SecurityServiceForSystem-AccountManagementCapabilities {E} AccountManagementService OperationsSupported: uint16[] CreateAccount([IN] System: ref ElementCapabilities ComputerSystem {required}, [IN] AccountTemplate: string SettingsDefineCapabilities {required, embeddedinstance}, [OUT] Account: ref Account], [OUT] Identities: ref Identity[]);

uint32 {enum} {E}

AccountSettingData (E)

MaximumSuccessiveLoginFailures uint16

PasswordHistoryDepth: uint16 MaximumPasswordExpiration: datetime ComplexPasswordRulesEnforced: uint16[]

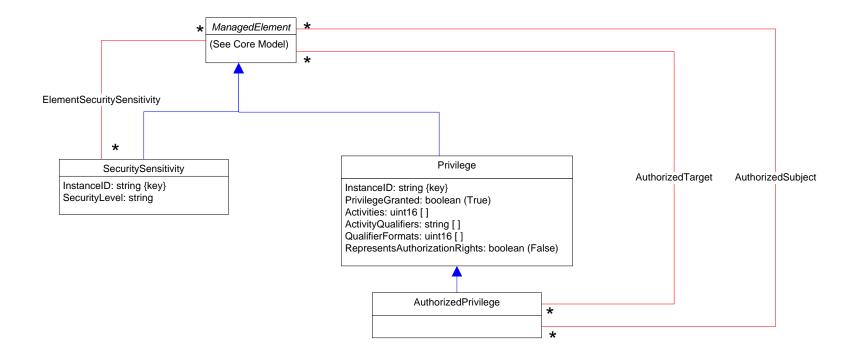
InactivityTimeout: datetime

Page 10-34: Authorization

CIM_User.vsd: August 6, 2007

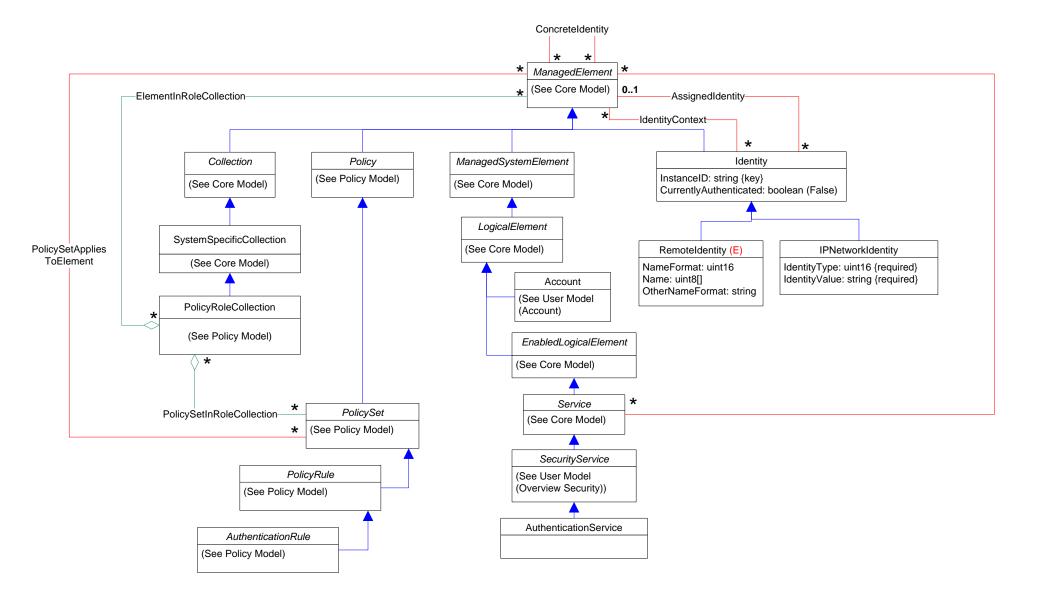
Title : User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

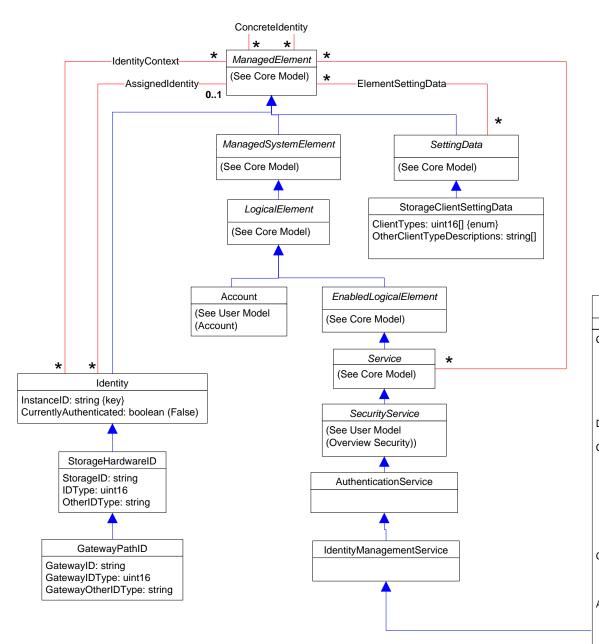


Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG



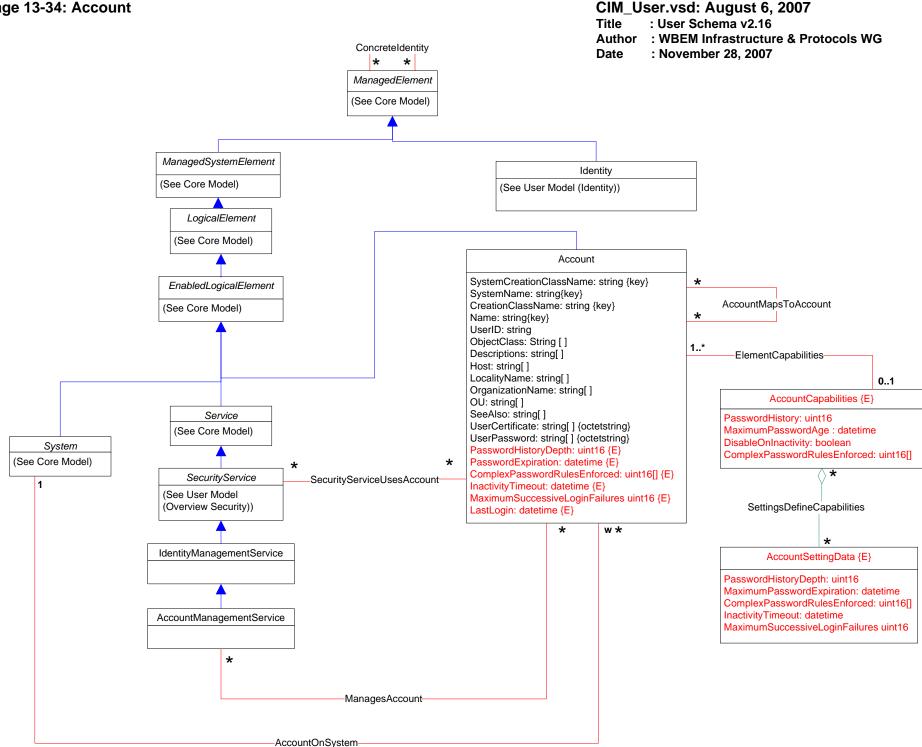
Page 12-34: Storage Identity



Title: User Schema v2.16

Author: WBEM Infrastructure & Protocols WG

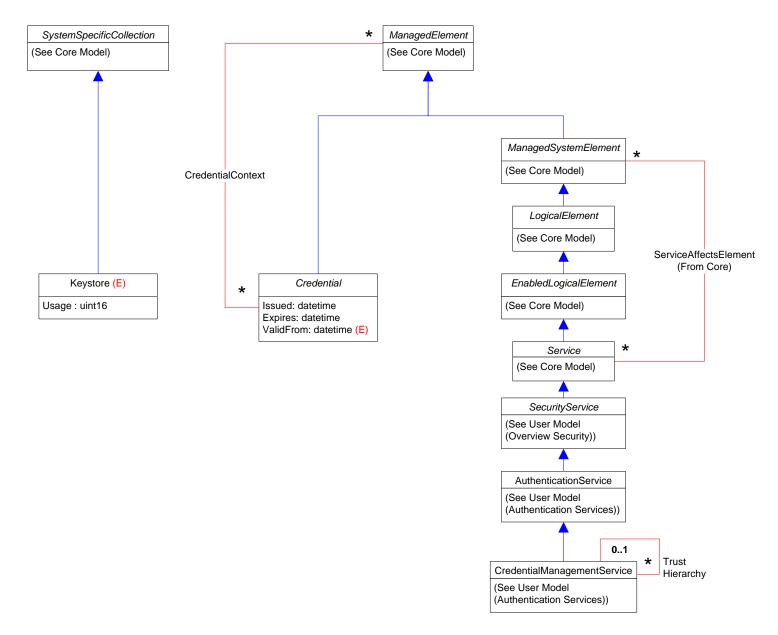
```
StorageHardwareIDMananagementService
CreateStorageHardwareID(
  [IN] ElementName: string,
  [IN] StorageID: string,
  [IN] IDType: uint16 {enum},
  [IN] OtherIDType: string,
  [IN] Setting: ref StorageClientSettingData,
  [OUT] HardwareID : ref StorageHardwareID) : uint32 {enum}
DeleteStorageHardwareID(
  [IN] HardwareID : ref StorageHardwareID) : uint32 {enum}
CreateGatewayPathID(
  [IN] ElementName: string,
  [IN] StorageID: string
  [IN] IDType: uint16 {enum},
  [IN] OtherIDType: string,
  [IN] GatewayID: string,
  [IN] GatewayIDType : uint16 {enum},
  [IN] OtherGatewayIDType: string
  [OUT] NewGatewayPathID : ref GatewayPathID) : uint32 {enum}
CreateHardwareIDCollection(
  [IN] ElementName: string,
  [ IN] HardwareIDs : string[],
  [OUT] Collection : ref SystemSpecificCollection): uint32 {enum}
AddHardwareIDsToCollection(
  [IN] HardwareIDs : string[],
  [IN] Collection : ref SystemSpecificCollection): uint32 {enum}
```



Page 14-34: Credential

Title: User Schema v2.16

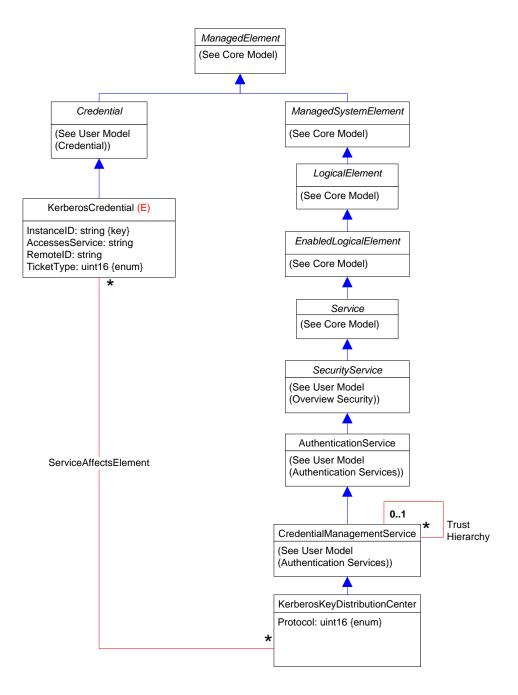
Author : WBEM Infrastructure & Protocols WG

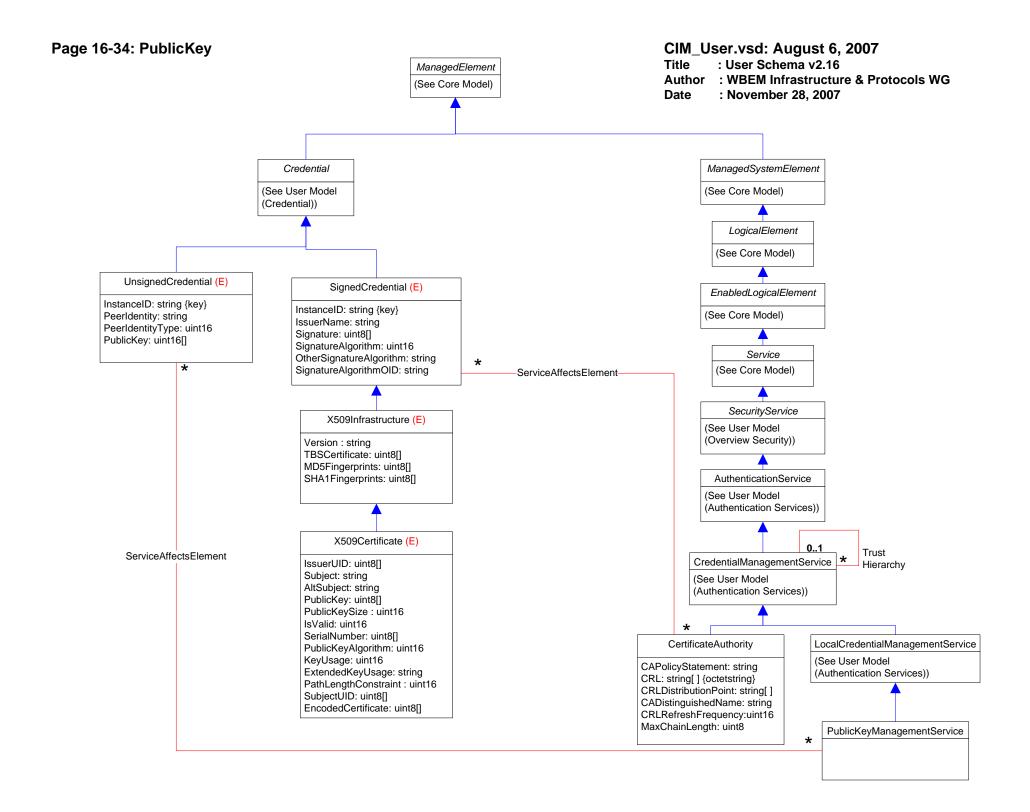


Page 15-34: Kerberos

Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG





Page 17-34: SharedSecret

ManagedElement Date (See Core Model) Credential ManagedSystemElement (See User Model (See Core Model) (Credential)) LogicalElement (See Core Model) EnabledLogicalElement NamedCredential (E) SharedCredential (E) (See Core Model) InstanceID: string {key} InstanceID: string {key} LocalIdentity: string RemoteID: string LocalIdentityType: uint16 Service Secret: string PeerIdentity: string Algorithm: string (See Core Model) PeerIdentityType: uint16 Protocol: string SharedSecretName: string SecurityService (See User Model (Overview Security)) AuthenticationService (See User Model (Authentication Services)) 0..1 ServiceAffectsElement Trust CredentialManagementService | * ServiceAffectsElement Hierarchy (See User Model (Authentication Services)) LocalCredentialManagementService (See User Model (Authentication Services)) SharedSecretService Algorithm: string Protocol: string

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

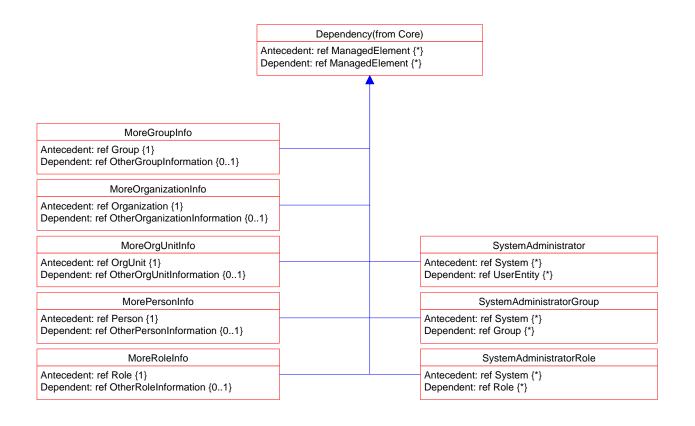
Author : WBEM Infrastructure & Protocols WG

Page 18-34: User Associations

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author: WBEM Infrastructure & Protocols WG



Page 19-34: Security Associations

AuthorizedTarget

Privilege: ref AuthorizedPrivilege {*}
TargetElement: ref ManagedElement {*}

CIM_User.vsd: August 6, 2007 Title : User Schema v2.16 Author : WBEM Infrastructure & Protocols WG Date : November 28, 2007 IdentityContext ElementInContext: ref Identity {*} ElementProvidingContext: ref ManagedElement {*} AssignedIdentity IdentifyingInfo: ref Identity {*} ManagedElement: ref ManagedElement {0..1} LogicalIdentity SystemElement: ref ManagedElement {key, *} SameElement: ref ManagedElement {key, *} AccountIdentity {D} SystemElement: ref Account {key, *} SameElement: ref Identity {key, *}

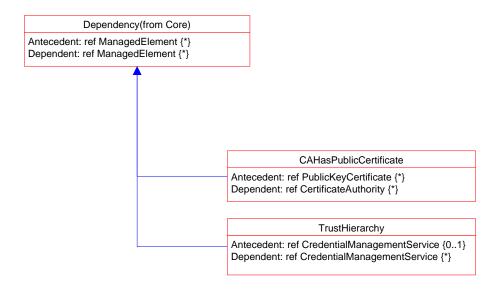
ConcreteIdentity

SystemElement: ref Account {key, *}
SameElement: ref Identity {key, *}

Dependency(from Core) Antecedent: ref ManagedElement {*} Dependent: ref ManagedElement {*} AccountMapsToAccount ProvidesServiceToElement Antecedent: ref Account {*} Antecedent: ref Service {*} Dependent: ref ManagedSystemElement {*} Dependent: ref Account {*} SecurityServiceForSystem ManagesAccount Antecedent: ref SecurityService {*} Antecedent: ref AccountManagementService {*} Dependent: ref System {*} Dependent: ref Account {*} ManagesAccountOnSystem {D} Antecedent: ref AccountManagementService {*} Dependent: ref System {*} ServiceServiceDependency (From Core) Antecedent: ref Service {*} Dependent: ref Service {*} TypeOfDependency: uint16 {enum} RestartService: boolean SecurityServiceUsesAccount ServiceUsesSecurityService Antecedent: ref Account {*} Antecedent: ref SecurityService {*} Dependent: ref SecurityService {*} Dependent: ref Service {*} AuthorizedSubject Privilege: ref AuthorizedPrivilege {*} PrivilegeElement: ref ManagedElement {*} RoleLimitedToTarget DefiningRole: ref Role {key, *}

TargetElement: ref ManagedElement {key, *}

Page 20-34: Credential Associations



CredentialContext

ElementInContext: ref Credential {key, *}

ElementProvidingContext: ref ManagedElement {key, *}

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author: WBEM Infrastructure & Protocols WG

Page 21-34: Aggregations

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author: WBEM Infrastructure & Protocols WG

Date: November 28, 2007

CollectionInOrganization

Parent: ref OrganizationalEntity {0..1}

Child: ref Collection {*}

CollectionInSystem

Parent: ref System {0..1} Child: ref Collection {*}

MemberOfCollection (from Core)

Collection: ref Collection {*} Member: ref ManagedElement {*}

OrgStructure

Parent: ref OrganizationalEntity {0..1} Child: ref OrganizationalEntity {*}

SystemComponent (from Core)

GroupComponent: ref System {*}
PartComponent: ref ManagedSystemElement {*}

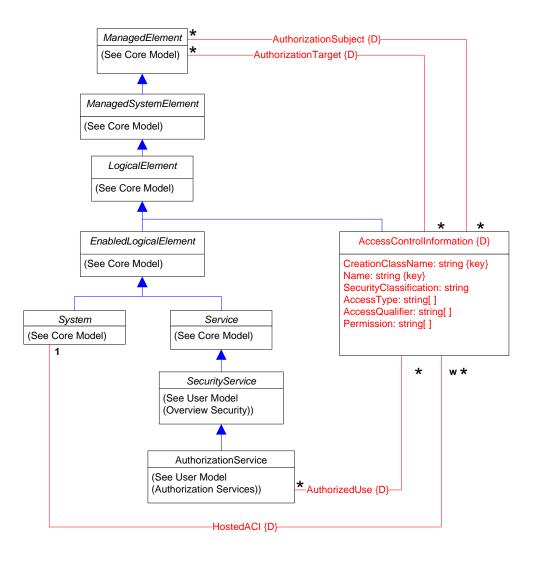
Accou

AccountOnSystem

GroupComponent: ref System {1}
PartComponent: ref Account {weak, *}

Title: User Schema v2.16

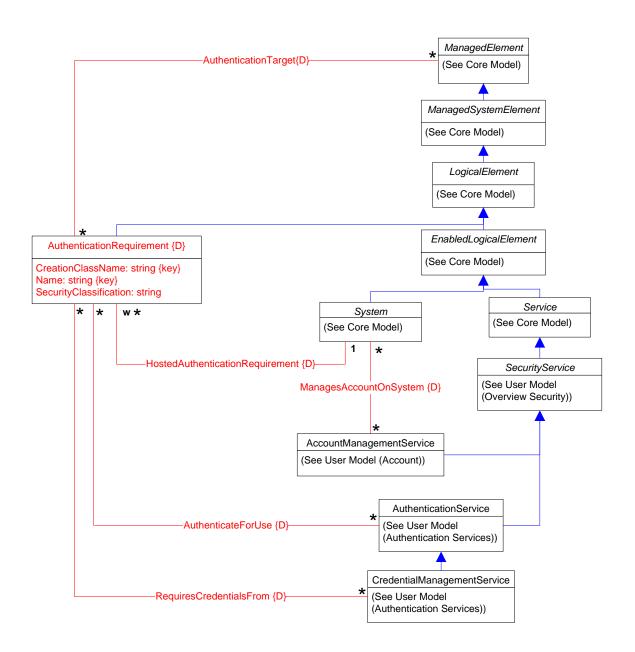
Author : WBEM Infrastructure & Protocols WG



Page 23-34: Deprecated Authentication

Title: User Schema v2.16

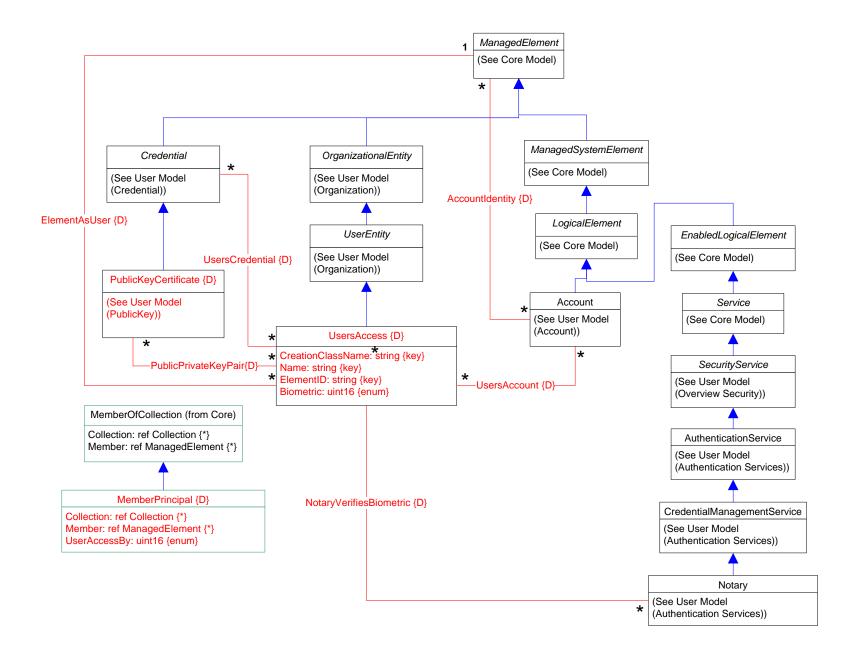
Author : WBEM Infrastructure & Protocols WG



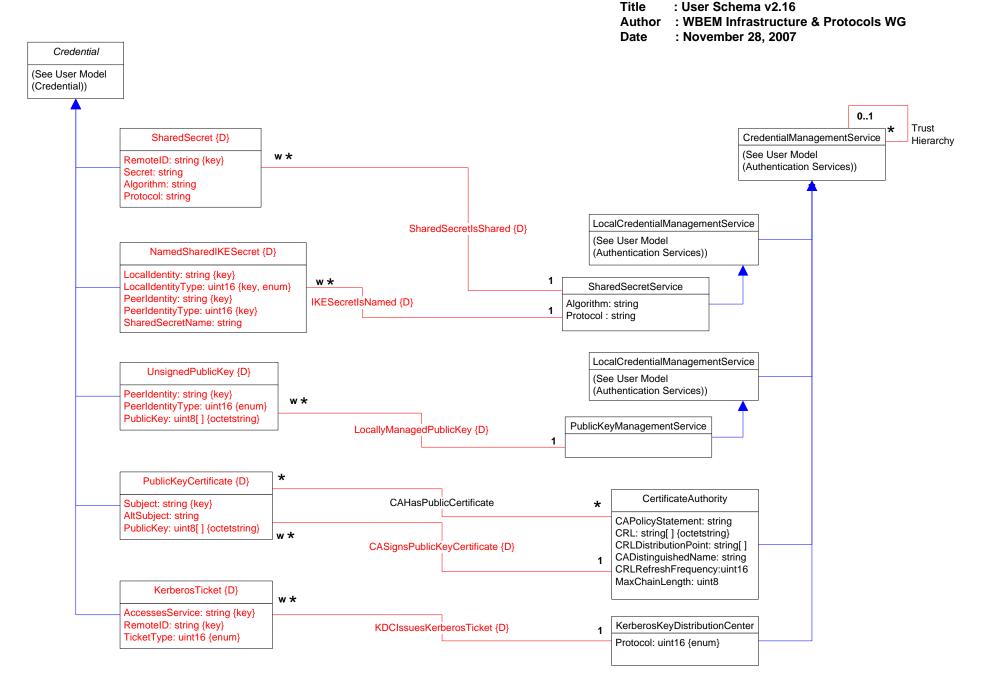
Page 24-34: Deprecated UserAccess

Title: User Schema v2.16

Author: WBEM Infrastructure & Protocols WG

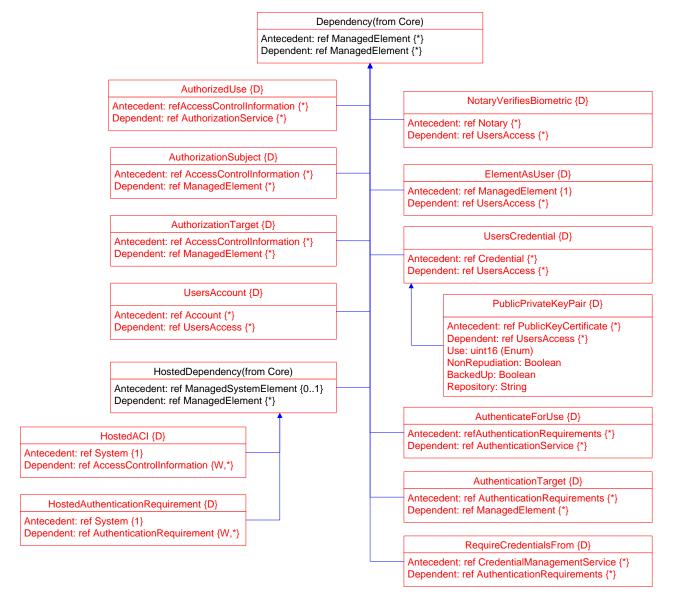


Page 25-34: Deprecated Credential

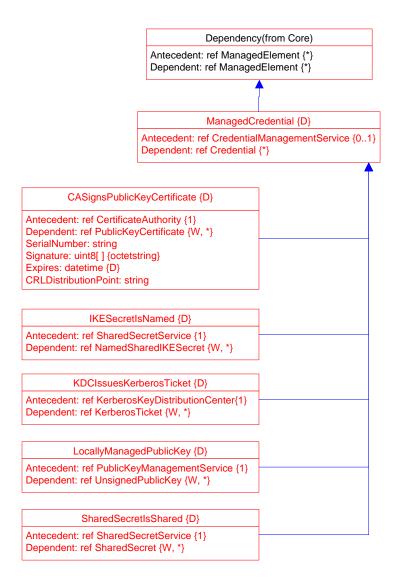


Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG



Page 27-34: Deprecated ManagedCredential



CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

Page 28-34: Version 2.9

CIM_User.vsd: August 6, 2007

Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

Date : November 28, 2007

Version 2.9 Preliminary

- * DMTFCR01222: Add CredentialContext
- * DMTFCR01302: Add RoleLimitedToTarget
- * DMTFCR01342: Add Privilege.QualifierFormats.SCSI Command

Add Privilege.RepresentsAuthorizationRights

Add PrivilegeManagementService.ChangeAccess()

Add PrivilegeManagementService.ShowAccess()

* DMTFCR01380 Clarification of CredentialContext

Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

Date : **November 28, 2007**

Version 2.10:

CIM_AccountGroup

<change cr="DMTFCR01083" type = "new"> Add PrivilegeManagementCapabilities </change>

<change cr="DMTFCR01501" type = "new"> Create AccountGroup and Define relationship to ChangeAccess, ShowAccess, Roles, and authorizationPolicy. </change>

CIM_AccountIdentity

<change cr="DMTFCR01503" type = "deprecate"> Deprecate

AccountIdentity, SecurityServiceForSystem, ManagesAccountOnSystem, and ServiceUsesSecurityService </change>

CIM_CollectionInSystem

<change cr="DMTFCR01502" type = "deprecate"> Deprecated CollectionInSystem in favor of OwningCollectionElement </change>

<change cr="DMTFCR01145" type = "deprecate"> Deprecated CollectionInSystem in favor of HostedCollection

CIM Credential

<change cr="DMTFCR01514" type = "change"> Fix description of timestamp in Credential </change>

CIM CredentialContex

<change cr="CIMCoreCR00750" type = "change"> Clarification of CredentialContext </change>

<change cr="DMTFCR01379" type = "new"> Add Credential Context </change>

<change cr="DMTFCR01222" type = "new"> Define a CredentialContext association </change>

CIM_GatewayPathID

<change cr="DMTFCR01299" type = "change"> Add iSCSI support to the enum of ID Types used for SCSI LUN Masking </change>

CIM_Group

<change cr="DMTFCR01515" type = "change"> Clarify inteeded use for LDAP, not general </change>

CIM IdentityContext

<change cr="DMTFCR01380" type = "change"> Clarify IdentityContext cardinalities </change>

CIM_ManagesAccountOnSystem

<change cr="DMTFCR01503" type = "deprecate"> Deprecate AccountIdentity, SecurityServiceForSystem, ManagesAccountOnSystem, and ServiceUsesSecurityService
</change>

CIM_Privilege

<change cr="DMTFCR01547" type = "change"> Fix enumeration conflict generated by DMTFCR01442 </change>

<change cr="DMTFCR01342" type = "change"> Change and Show Access Rights </change>

PrivilegeManagementCapabilities

<change cr="DMTFCR01083" type = "new"> Add PrivilegeManagementCapabilities </change>

CIM_PrivilegeManagementService

<change cr="DMTFCR01547" type = "change"> Fix enumeration conflict generated by DMTFCR01442 </change>

<change cr="DMTFCR01342" type = "change"> Change and Show Access Rights </change>

<change cr="DMTFCR01083" type = "change"> Add PrivilegeManagementCapabilities </change>

CIM_PrivilegePropagationRule

<change cr="DMTFCR01342" type = "new"> Change and Show Access Rights </change>

CIM SecurityServiceForSystem

<change cr="DMTFCR01503" type = "deprecate"> Deprecate AccountIdentity, SecurityServiceForSystem, ManagesAccountOnSystem, and ServiceUsesSecurityService
</change>

CIM ServiceUsesSecurityService

<change cr="DMTFCR01503" type = "deprecate"> Deprecate AccountIdentity, SecurityServiceForSystem, ManagesAccountOnSystem, and ServiceUsesSecurityService

CIM_StorageHardwareID

<change cr="DMTFCR01299" type = "change"> Add iSCSI support to the enum of ID Types used for SCSI LUN Masking </change>

CIM StorageHardwareIDManagementService

<change cr="DMTFCR01299" type = "change"> Add iSCSI support to the enum of ID Types used for SCSI LUN Masking </change</p>

Page 30-34: Version 2.13

Version 2.13:

Change:

CIM_StorageHardwareID

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

Page 31-34: Version 2.14

Version 2.14:

Change:

CIM_Account

CIM_AssignedIdentity

CIM_StorageHardwareIDManagementService

CIM_RoleBasedAuthorizationService

CIM_Role

New:

CIM_AccountCapabilities

CIM_AccountManagementCapabilities

CIM_AccountSettingData

CIM_ElementSecuritySensitivity

CIM_IdentityManagementService

CIM_IdentitySecurityClearance

CIM_OrgEntityManagementService

CIM_PrivilegeManagementCapabilities

CIM_SecuritySensitivity

CIM_User.vsd: August 6, 2007

Title: User Schema v2.16

Author - WREM Infrastructure & Protocols WG

Page 32-34: Version 2.15

Version 2.15:

New:

CIM_RoleBasedManagementCapabilities

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author - WREM Infrastructure & Drotocols WG

Page 33-34: Version 2.16

Version 2.16:

Change:

CIM_AccountManagementService

New:

CIM_RemoteIdentity

CIM KerberosCredential

CIM_NamedCredential

CIM_SharedCredential

CIM_SignedCredential

CIM_UnsignedCredential

Deprecated:

CIM_CASignsPublicKeyCertificate

CIM IKESecretIsNamed

CIM KDCIssuesKerberosTicket

CIM_KerberosTicket

CIM_LocallyManagedPublicKey

CIM_ManagedCredential

CIM_NamedSharedIKESecret

CIM_PublicKeyCertificate

CIM_SharedSecretIsShared

CIM_UnsignedPublicKey

CIM_SharedSecret

CIM_User.vsd: August 6, 2007

Title: User Schema v2.16

Author : WBEM Infrastructure & Protocols WG

Page 34-34: Version 2.17

Version 2.17: Change: Credential SignedCredential Remoteldentity

New: X509Infrastructure X509Certificate Keystore

Deprecated:

CIM_User.vsd: August 6, 2007

Title : User Schema v2.16

Author : WBEM Infrastructure & Protocols WG