



DoDAF v2.0 Viewpoint Definitions

DoDAF 2.0 Viewpoint Definitions

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CUSTOMER RESOURCE OPTIONS

Supporting users throughout their entire journey of learning model-based systems engineering (MBSE) is central to Vitech's mission. For users looking for additional resources outside of this document, please refer to the links below. Alternatively, all links may be found at www.vitechcorp.com/resources.



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All Resources	Advanced
Beginner	IT / Sys Admin
Intermediate	Student

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DoDAF 2.0 Viewpoint Definitions

GENERAL

The following instructions identify the entities that appear in the various DoDAF 2.0 Viewpoints. It identifies the relationships used to select the appropriate entities contained in the viewpoint. It also identifies attributes that may appear in the viewpoint.

These reports require that the Project is created using the Capability Architecture Development v70 schema.

The file ‘...GENESYS 7 Collaborative Edition/Extensions/DoDAF 2.0 Viewpoint Template.gnsx’ must be imported into the current project. This file contains hierarchy definitions that are necessary for the reports to output the expected diagrams.

In the model, an Architecture entity may contain an *augmented by* relation with a target class of Text or ExternalFile. If there is a target of the augmented by relation, the Architecture description will be followed by either the description attribute in the case of a Text or Table designation or by the specified graphic file specified by the External File Path. If multiple target entities are cited, their order is determined by the Position attribute on the *augmented by* relationships.

While not required, it is recommended that the user runs the “PUID Wizard” (located in the Utilities ribbon bar) to assign project unique IDs for entities in the project.

DEFINITION LAYOUT

For each DoDAF Viewpoint that follows in this document, the following table is used to describe the contents of the Viewpoint:

Viewpoint Title
DoDAF Description: (this section provides a brief description of the DoDAF Viewpoint)
Implementation (This section provides a pseudo-logical description of how the viewpoint is created, essentially the steps the underlying viewpoint report takes to develop the view when it is executed.)

DoDAF 2.0 Viewpoint Definitions

ALL VIEWPOINTS

AV-1 Overview and Summary
DoDAF Description: The view describes a Project's Visions, Goals, Objectives, Plans, Activities, Events, Conditions, Measures, Effects (Outcomes), and produced objects.
Implementation Architecture Attributes Description with <i>augmented by</i> External Files Purpose Scope Time Frame Relationships Description of <i>achieves</i> Mission List of <i>documented by</i> Documents in the following order: Goals Guidance Standards Strategy <i>composed of</i> OperationalNodes providing the following diagrams and tables: Physical Hierarchy Diagram Physical Block Diagram Resource Flow Table Table providing number, name, description in following Class order: <i>specified by</i> Capability <i>composed of</i> Component <i>assigned to</i> Organization <i>composed of</i> Performer <i>specified by</i> Requirement

AV-2 Integrated Dictionary
DoDAF Description: This view presents an architectural data repository with definitions of all terms used throughout the architectural data and presentations.
Implementation Architecture Relationships Name, Acronym, Description of <i>uses</i> DefinedTerm

DoDAF 2.0 Viewpoint Definitions

CAPABILITY VIEWPOINTS

CV-1 Vision
DoDAF Description: This view presents the overall vision for transformational endeavors, which provides a strategic context for the capabilities described and a high-level scope.
Implementation Architecture Relationships Name, Description, Rationale, Benefit of <i>specified by</i> Capability
Uses Capability Vision Hierarchy

CV-2 Capability Taxonomy
DoDAF Description: This view presents a hierarchy of capabilities which specifies all the capabilities that are referenced throughout one or more Architectural Descriptions.
Implementation Architecture Relationships Name, Description, Rationale, Benefit, Priority of <i>specified by</i> Capability Name, Description, Rationale, Benefit, Priority of <i>refined by</i> Capability
Uses Capability Hierarchy

CV-3 Capability Phasing
DoDAF Description: This view presents a hierarchy of capabilities which specifies all the capabilities that are referenced throughout one or more Architectural Descriptions.
Implementation Architecture Relationships Name, Description, Objectives, TimeFrame of <i>specified by</i> Capability Name, Description, Objectives, TimeFrame of <i>refined by</i> Capability
Uses Capability Hierarchy

DoDAF 2.0 Viewpoint Definitions

CV-4 Capability Dependencies
DoDAF Description: This view presents the dependencies between planned capabilities and the definition of logical groupings of capabilities.
Implementation Architecture Relationships <i>specified by Capability</i> Name, Description <i>categorizes</i> Capability of <i>categorized by</i> Category Name, Description <i>categorizes</i> Capability of <i>includes</i> Category Uses Capability Dependencies Hierarchy

CV-5 Capability to Organizational Development Mapping
DoDAF Description: This view presents the fulfillment of capability requirements shows the planned capability deployment and interconnection for a particular Capability Phase. The CV-5 shows the planned solution for the phase in terms of performers and locations and their associated concepts.
Implementation Architecture Relationships <i>specified by Capability</i> <i>refined by Capability</i> Name, Description, of <i>supplied by</i> ProgramElement Name of <i>assigned to</i> Organization Uses Capability to Organization Hierarchy

CV-6 Capability to Operational Activities Mapping
DoDAF Description: This view presents a mapping between the capabilities required and the operational activities that those capabilities support.
Implementation Architecture Relationships <i>specified by Capability</i> <i>refined by Capability</i> Name, Description of <i>basis of</i> OperationalActivity Name <i>allocated to</i> Performer Uses Capability to Operational Activities Hierarchy

DoDAF 2.0 Viewpoint Definitions

CV-7 Capability to Services Mapping

DoDAF Description: This view presents a mapping between the capabilities and the services that these capabilities enable.

Implementation

Architecture

Relationships

Name, Description of *specified by* Capability

Name, Description of *refined by* Capability

basis of OperationalActivity

allocated to Performer¹

Name, Description of *joins* Performer

1 Performer (Type = 'Service Functional Provider')

DoDAF 2.0 Viewpoint Definitions

DATA AND INFORMATION VIEWPOINTS

DIV-1 Conceptual Data Model
DoDAF Description: This view presents the high-level data concepts and their relationships.
Implementation Architecture Relationships <i>composed of</i> Component, Performer <i>built from</i> Component, Performer <i>performs</i> Function, OperationalActivity <i>inputs, outputs, triggered by</i> Item, OperationalItem Name <i>specified by</i> Requirement Name, Description

DIV-2 Logical Data Model
DoDAF Description: This view presents the documentation of the data requirements and structural business process (activity) rules. In DoDAF V1.5, this was the OV-7.
Implementation Architecture Relationships <i>composed of</i> Performer <i>built from</i> Performer <i>performs</i> OperationalActivity <i>inputs, outputs, triggered by</i> OperationalItem Name, Description, Type, Size, size Units, Priority, Accuracy, Timeliness of <i>transfers</i> OperationalItem <i>decomposed by</i> OperationalItem Decomposes Name <i>connected to</i> Needline <i>transfers</i> OperationalItem Name, Description, Type, Size, size Units, Priority, Accuracy, Timeliness of <i>transfers</i> OperationalItem

DIV-3 Physical Data Model
DoDAF Description: This view presents the physical implementation format of the Logical Data Model entities, e.g., message formats, file structures, physical schema. In DoDAF V1.5, this was the SV-11.
Implementation Architecture Relationships <i>composed of</i> Component (Type = Family of Systems/Systems Architecture/System of Systems) <i>built from</i> Component (Type = System, Service) <i>connected to</i> Link <i>transfers</i> Item Name, Description, Type, Size, Size Units, Priority, Accuracy, Timeliness, Format Type, Media

DoDAF 2.0 Viewpoint Definitions

OPERATIONAL VIEWPOINTS

OV-1 High Level Operational
<p>DoDAF Description: This view presents the high-level graphical/textual description of operational concept. (NOTE: A high level graphic, normally an artistic power point chart or jpg file is used to provide a high level operational context for an architecture. This graphic diagram should be provided in an external file that is related to the architecture with the “<i>augmented by</i>” relationship.)</p>
<p>Implementation Architecture Description of Architecture <i>augmented by</i> ExternalFile Relationships <i>composed of</i> Performer (Type = OperationalArchitecture) <i>built from</i> Performer (Type = Organization, Human, Service Consumer. Service Functionality Provider, Unanticipated User)</p> <p>Uses Physical Hierarchy for <i>composed of</i> Performer</p>

OV-2 Operational Resource Flow Description
<p>DoDAF Description: This view presents a description of the resource flows exchanged between operational activities.</p>
<p>Implementation Architecture Relationships <i>composed of</i> Performer (Type = OperationalArchitecture) <i>built from</i> Performer (Type = Organization, Human, Service Consumer. Service Functionality Provider, Unanticipated User) Name, Description of <i>connected to</i> Needline Name of <i>transfers</i> OperationalItem Name of <i>connects to</i> Performer</p> <p>Uses Physical Block Diagram</p>

OV-3 Operational Resource Flow Matrix
<p>DoDAF Description: This view presents a description of the resources exchanged and the relevant attributes of the exchanges.</p>
<p>Implementation Architecture Relationships <i>composed of</i> Performer (Type = OperationalArchitecture) <i>built from</i> Performer (Type = Organization, Human, Service Consumer. Service Functionality Provider, Unanticipated User) Name of <i>connected to</i> Needline Name, Description, Accuracy, Timeliness of <i>transfers</i> OperationalItem Name <i>connects¹ to</i> Performer</p> <p>Note 1: <i>connects to</i> Direction attribute determines Source/Destination</p>

DoDAF 2.0 Viewpoint Definitions

OV-4 Organizational Relationships Chart

DoDAF Description: This view presents the organizational context, role, or other relationships among organizations.

Implementation

Architecture

Relationships

Name, Description, Role, Location of *assigned to* Organization

Name *coordinates with* Organization

Uses Organization Hierarchy

OV-5a Operational Activity Decomposition Tree

DoDAF Description: This view presents the capabilities and activities (operational activities) organized in a hierarchal structure.

Implementation

Architecture

Relationships

Name of *specified by* Capability

Name, Description of *specified by* Capability

Name, Description of *refined by* Capability

Name of *basis of* OperationalActivity

Name of *performed by* Performer

Uses Function Hierarchy

OV-5b Operational Activity Model

DoDAF Description: This view presents the context of capabilities and activities (operational activities) and their relationships among activities, inputs, and outputs.

Implementation

Architecture

Relationships

Name, Description of *specified by* Capability

Name, Description of *refined by* Capability

Name of *basis of* OperationalActivity

Name of *inputs/outputs/triggered by* OperationalItem

Name of *input to/output from/triggers* OperationalActivity

Name of *based on* Capability

Uses Enhanced FFBD

DoDAF 2.0 Viewpoint Definitions

OV-6a Operational Rules Model

DoDAF Description: One of three viewpoints used to describe activity (operational activity). It identifies business rules that constrain operations.

Implementation

Architecture

Relationships

composed of Performer (Type = OperationalArchitecture)

built from Performer (Type = Organization, Human, Service Consumer, Service Functionality Provider, Unanticipated User)

Name of *performs* OperationalActivity

Name of *decomposed by* OperationalActivity

Name, Description of *documented by* Document (type = Guidance)

Name, Description of *documented by* Document (type = Standard)

OV-6b State Transition Description

DoDAF Description: This view presents one of three viewpoints used to describe activity (operational activity). It identifies business rules that constrain operations

Implementation

Architecture

Relationships

composed of Performer (Type = OperationalArchitecture)

built from Performer (Type = Organization, Human, Service Consumer, Service Functionality Provider, Unanticipated User)

Name, Description of *exhibits* State

ExternalFilePath of *augmented by* ExternalFile

OV-6c Event-Trace Description

DoDAF Description: This view presents one of three viewpoints used to describe activity (operational activity). It traces actions in a scenario or sequence of events.

Implementation

Architecture

Relationships

composed of Performer (Type = OperationalArchitecture)

built from Performer (Type = Organization, Human, Service Consumer, Service Functionality Provider, Unanticipated User)

Name, Description of *performs* OperationalActivity

Name of *inputs/triggered by/outputs* OperationalItem

DoDAF 2.0 Viewpoint Definitions

PROJECT VIEWPOINTS

PV-1 Project Portfolio Relationships
DoDAF Description: This view describes the dependency relationships between the organizations and projects and the organizational structures needed to manage a portfolio of projects.
Implementation Architecture Relationships <i>implemented by</i> ProgramElement Name, Description of <i>includes</i> ProgramElement Name Location of <i>assigned to</i> Organization
Uses Work Breakdown Structure Hierarchy

PV-2 Project Timelines
DoDAF Description: The view presents a timeline perspective on programs or projects, with the key milestones and interdependencies.
Implementation Architecture Relationships Name, Contract Number of <i>implemented by</i> ProgramElement <i>augmented by</i> ExternalFile Name, Description, Type Start Date, End Date of <i>includes</i> ProgramElement

PV-3 Project to Capability Mapping
DoDAF Description: The view presents a mapping of programs and projects to capabilities to show how the specific projects and program elements help to achieve a capability.
Implementation Architecture Relationships <i>implemented by</i> ProgramElement Name, Description of <i>includes</i> ProgramElement Name, Description of <i>supplies</i> Capability
Uses Project Portfolio Hierarchy

STANDARDS VIEWPOINTS

StdV-1-2 Standards Profile
<p>DoDAF Description: This view presents the listing of standards that apply to solution entities along with the description of emerging standards and potential impact on current solution entities, within a set of time frames.</p>
<p>Implementation</p> <p>Architecture</p> <p>Relationships</p> <ul style="list-style-type: none">Name of <i>composed of</i> ComponentName of <i>built from</i> ComponentName of <i>joined to</i> InterfaceName of <i>connected to</i> LinkName of <i>performs</i> FunctionName of inputs/triggered by/outputs of <i>Item</i><ul style="list-style-type: none">Name of Documents of type Standard <i>specified by</i> Component, Interface, Link, Function, and Items <p>Name, Description, Entities Affected, Standard Type</p> <p>Name, Govt Category/Non-Govt Category of <i>documented by</i> Document</p>

SYSTEMS VIEWPOINTS

SV-1 Systems Interface Description
DoDAF Description: This view identifies systems, system items, and their interconnections.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems) Name, Description, <i>augmented by</i> ExternalFile, <i>implements</i> Performer of <i>built from</i> Component (type = System) Name, Description <i>joined to</i> Interface Name, Description <i>comprised of</i> Link Name, <i>Type of transfers</i> Item Name of <i>joins to</i> Component Uses Interface Block Diagram

SV-2 Systems Resource Flow Description
DoDAF Description: The view identifies the resource flows exchanged between systems.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems) Name, Description, <i>augmented by</i> ExternalFile, <i>implements</i> Performer of <i>built from</i> Component (type = System) Name, Description <i>connected to</i> Link Name, <i>Type of transfers</i> Item Uses Interface Block Diagram

SV-3 System-System Matrix
DoDAF Description: The view identifies the relationships among systems.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems) Name, Description of <i>built from</i> Component (type = System) Name, Description <i>joined to</i> Interface Name, Description, Type of <i>joins to</i> Component (type = System, External System, Human, Facility)

DoDAF 2.0 Viewpoint Definitions

SV-4 Systems Functionality Description

The **DoDAF Description:** The view identifies the functions (activities) performed by systems and the system data flows among system functions (activities).

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = System)

Name, Description *performs* (type = #integrated (Root)) Function

Name of *inputs/outputs/triggered by* Item

Name of *input to/output from/triggers* Source/Destination Function

Uses EFFBD

SV-5a Operational Activity to System Functions Traceability Matrix

DoDAF Description: The view identifies the mapping of system functions (activities) back to operational activities (activities).

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = System)

Name, Description of *built from* Component (type = System)

Name, Description *performs* Function

Name of *implements* OperationalActivity

Name of *performed by* Performer

Name of *based on* by Performer

SV-5b Operational Activity to System Traceability Matrix

DoDAF Description: This view identifies the mapping of systems back to capabilities or operational activities.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/Systems

Architecture/System of Systems)

Name, Description of *built from* Component (type = System)

Name, Description *performs* (type = #integrated (Root)) Function

Name of *implements* OperationalActivity

Name of *performed by* Performer

Name of *based on* Capability

SV-6 Systems Resource Flow Matrix
<p>DoDAF Description: This view provides details of system resource flow entities being exchanged between systems and the attributes of that exchange.</p>
<p>Implementation</p> <p>Part 1</p> <p>Architecture</p> <p>Relationships</p> <p style="padding-left: 20px;"><i>composed of</i> Component (Type = System)</p> <p style="padding-left: 20px;"><i>built from</i> Component (Type = System)</p> <p style="padding-left: 20px;">Name of <i>connected to</i> Link</p> <p style="padding-left: 40px;">Name, Description, Accuracy, Timeliness, Size, Size Units, of <i>transfers</i> Item</p> <p style="padding-left: 40px;">Name of <i>connects</i>¹ to Performer</p> <p>Part 2</p> <p>Relationships</p> <p style="padding-left: 20px;"><i>specified by</i> Requirement</p> <p style="padding-left: 20px;">Description</p> <p style="padding-left: 40px;">Name, Description, Media of associated Item from Part 1</p> <p style="padding-left: 40px;">Type, Key Performance Parameter of associated Item from Part 1</p> <p style="padding-left: 40px;">Name of <i>categorized by</i> Category</p> <p style="padding-left: 40px;">Security Level or Name, Classification Category, Dissemination Control of <i>classified by</i></p> <p>Classification</p> <p>1 connects to Direction attribute determines Source/Destination</p>

SV-6 Systems Resource Flow Summary Matrix
<p>DoDAF Description: This summary view provides details of system resource flow entities being exchanged between systems and the attributes of that exchange.</p>
<p>Implementation</p> <p>Architecture</p> <p>Relationships</p> <p style="padding-left: 20px;"><i>composed of</i> Performer (Type = Component)</p> <p style="padding-left: 20px;"><i>built from</i> Performer (Type = Service)</p> <p style="padding-left: 20px;">Name of <i>connected to</i> Link</p> <p style="padding-left: 40px;">Name, Description, Accuracy, Timeliness of <i>transfers</i> Item</p> <p style="padding-left: 40px;">Name <i>connects</i>¹ to Component (Source)</p> <p style="padding-left: 40px;">Name <i>connects</i>¹ to Component (Destination)</p> <p>1 connects to Direction attribute determines Source/Destination</p>

DoDAF 2.0 Viewpoint Definitions

SV-7 Systems Measures Matrix

DoDAF Description: This view provides the measures (metrics) of systems entities for the appropriate timeframe(s)¹.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/Systems)

Architecture/System of Systems)

Name, Description of *built from* Component (type = System)

Name of *performs* (type = #*Integrated (Root)*) Function

Key Performance Parameter of *specified by* Requirement (type = Performance)

Name, Description of *specified by* Requirement (type = Performance)

Name of *connected to* Link

Key Performance Parameter of *specified by* Requirement (type = Performance)

Name, Description of *specified by* Requirement (type = Performance)

¹ Objective should have three (3) values representing Short-Term, Mid-Term, and Long-Term values.

SV-8 Systems Evolution Description

DoDAF Description: This view identifies the planned incremental steps towards migrating a suite of systems to a more efficient suite, or toward evolving a current system to a future implementation.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/Systems)

Architecture/System of Systems)

Name, Description of *built from* Component (type = System)

The View

ExternalFilePath of *augmented by* ExternalFile

SV-9 Systems Technology Forecast

DoDAF Description: This view identifies the emerging technologies, software/hardware products, and skills that are expected to be available in a given set of time frames and that will affect future system development.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/Systems)

Architecture/System of Systems)

Name, Description of *built from* Component (type = System)

The View

ExternalFilePath of *augmented by* ExternalFile

DoDAF 2.0 Viewpoint Definitions

SV-10a Systems Rules Model
<p>DoDAF Description: This view is one of three viewpoints used to describe system functionality. It identifies constraints that are imposed on systems functionality due to some aspect of system design or implementation.</p>
<p>Implementation</p> <p>Architecture</p> <p>Relationships</p> <p>Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems)</p> <p>Name, Description of <i>built from</i> Component (type = System)</p> <p>Name of <i>performs</i>¹ Function</p> <p>Name, Description of <i>based on/ specified by</i> Requirement²</p> <p>Name, Description of <i>connected to</i> Component</p> <p>Name, Description of <i>joins to</i> Interface</p> <p>Name, Description of <i>connected to</i> Item</p> <p>Name, Description of <i>connected to</i> Link</p> <p>Name, Description of <i>connected to</i> State</p>
<p>1 <i>performs</i> Behavior Type: = Integrated (Root)</p> <p>2 <i>documented by</i> Document (type = Guidance or type = Standard)</p>

SV-10b Systems State Transition Description
<p>DoDAF Description: This view is one of three viewpoints used to describe system functionality. It identifies responses of systems to events.</p>
<p>Implementation</p> <p>Architecture</p> <p>Relationships</p> <p>Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems)</p> <p>Name, Description of <i>built from</i> Component (type = System)</p> <p>Name, Description, <i>augmented by</i> ExternalFile of <i>exhibits</i> State</p> <p>Name, Description, <i>augmented by</i> ExternalFile of <i>decomposed by</i> State</p>

SV-10c Systems Event-Trace Description
<p>DoDAF Description: This view is one of three viewpoints used to describe system functionality. It identifies system-specific refinements of critical sequences of events described in the Operational Viewpoint.</p>
<p>Implementation</p> <p>Architecture</p> <p>Relationships</p> <p>Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems)</p> <p>Name, Description of <i>built from</i> Component (type = System)</p> <p>Name, Description of <i>performs</i> Function</p> <p>Name <i>inputs/triggered by/outputs</i> Item</p>

SERVICES VIEWPOINTS

SvcV-1 Services Interface Description
DoDAF Description: This view identifies services, service items, and their interconnections.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/System Architecture/System of Systems) Name, Description, <i>augmented by</i> ExternalFile, <i>implements</i> Performer of <i>built from</i> Component (type = Service) Name, Description <i>joined to</i> Interface Name, Description <i>comprised of</i> Link Name, <i>Type of transfers</i> Item Name of <i>joins to</i> Component Uses Interface Block Diagram

SvcV-2 Services Resource Flow Description
DoDAF Description: The view identifies the resource flows exchanged between Services.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/System Architecture/System of Systems) Name, Description, <i>augmented by</i> ExternalFile, <i>implements</i> Performer of <i>built from</i> Component (type = Service) Name, Description <i>connected to</i> Link Name, <i>Type of transfers</i> Item Uses Interface Block Diagram

SvcV-3a Systems-Services Matrix
DoDAF Description: The view identifies the relationships among or between systems and services.
Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/System Architecture/System of Systems) Name, Description of <i>built from</i> Component (type = Service) Name, Description <i>joined to</i> Interface Name, Description, Type of <i>joins to</i> Component (type = System, External Service, Human, Facility)

DoDAF 2.0 Viewpoint Definitions

SvcV-3b Service-Service Matrix

DoDAF Description: The view identifies the relationships among services.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/System Architecture/System of Systems)

Name, Description of *built from* Component (type = Service)

Name, Description *joined to* Interface

Name, Description, Type of *joins to* Component (type = Service)

SvcV-4 Services Functionality Description

The DoDAF Description: This view identifies the functions (activities) performed by services and the service data flows among service functions (activities).

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/System Architecture/System of Systems)

Name, Description of *built from* Component (type = Service)

Name, Description *performs (type = #integrated (Services))* Function

Name of *inputs/outputs/triggered by* Item

Name of *input to/output from/triggers* Function

SvcV-5 Operational Activity to Service Traceability Matrix

DoDAF Description: This view identifies the mapping of services back to capabilities or operational activities.

Implementation

Architecture

Relationships

Name, Description, of *composed of* Component (type = Family of Systems/System Architecture/System of Systems)

Name, Description of *built from* Component (type = Service)

Name, Description *performs (type = #integrated (RServices))* Function

Name of *implements* OperationalActivity

Name of *performed by* Performer

Name of *based on* Capability

SvcV-6 Services Resource Flow Matrix
<p>DoDAF Description: This view provides details of service resource flow entities being exchanged between services and the attributes of that exchange.</p>
<p>Implementation Full Matrix</p> <p>Part 1</p> <p>Architecture</p> <ul style="list-style-type: none"> Relationships <ul style="list-style-type: none"> <i>composed of</i> Component (Type = Service) <i>built from</i> Component (Type = Service) Name of <i>connected to</i> Link <ul style="list-style-type: none"> Name, Description, Range, Units, Accuracy, Precision, Priority, Media, Timeliness, Size, Size Units, Fields of <i>transfers</i> Item <ul style="list-style-type: none"> <i>implements</i> Needline <ul style="list-style-type: none"> Name of <i>connects</i>¹ to Component (Source) Name of <i>connects</i>¹ to Component (Destination) <p>Part 2</p> <p>Relationships <ul style="list-style-type: none"> <i>specified by</i> Requirement <ul style="list-style-type: none"> Description <p>Item from Part I</p> <p>Type, Key Performance Parameter <ul style="list-style-type: none"> Availability, Confidentiality, Integrity Classification, Classification Caveat, Dissemination Control <p>Implementation Summary Matrix</p> <p>Architecture</p> <ul style="list-style-type: none"> Relationships <ul style="list-style-type: none"> <i>composed of</i> Performer (Type = Component) <i>built from</i> Performer (Type = Service) Name of <i>connected to</i> Link <ul style="list-style-type: none"> Name, Description, Accuracy, Timeliness of <i>transfers</i> Item Name <i>connects</i>¹ to Component (Source) Name <i>connects</i>¹ to Component (Destination) <p><small>1 <i>connects to</i> Direction attribute determines Source/Destination</small></p> </p></p>

DoDAF 2.0 Viewpoint Definitions

SvcV-7 Services Measures Matrix
<p>DoDAF Description: This view provides the measures (metrics) of service entities for the appropriate timeframe(s).</p>
<p>Implementation</p> <p>Architecture</p> <p style="padding-left: 20px;">Relationships</p> <p style="padding-left: 40px;">Name, Description, of <i>composed of</i> Component (type = Family of Systems / System Architecture / System of Systems)</p> <p style="padding-left: 40px;">Name, Description of <i>built from</i> Component (type = Service)</p> <p style="padding-left: 40px;">Name, Description <i>performs</i> (type = #<i>integrated (Root)</i>) Function</p> <p style="padding-left: 60px;">Key Performance Parameter of <i>specified by</i> Requirement (type = Performance)</p> <p style="padding-left: 40px;">Name, Description of <i>specified by</i> Requirement (type = Performance)</p> <p style="padding-left: 20px;">Name, Description of <i>connected to</i> Link</p> <p style="padding-left: 40px;">Key Performance Parameter of <i>specified by</i> Requirement (type = Performance)</p> <p style="padding-left: 40px;">Name, Description of <i>specified by</i> Requirement (type = Performance)</p> <p>1 Objective should have three (3) values representing Short-Term, Mid-Term, and Long-Term values.</p>

SvcV-8 Services Evolution Description
<p>DoDAF Description: This view identifies the planned incremental steps towards migrating a suite of services to a more efficient suite, or toward evolving a current service to a future implementation.</p>
<p>Implementation</p> <p>Architecture</p> <p style="padding-left: 20px;">Relationships</p> <p style="padding-left: 40px;">Name, Description, of <i>composed of</i> Component (type = Family of Systems/System Architecture/ System of Systems)</p> <p style="padding-left: 40px;">Name, Description of <i>built from</i> Component (type = Service)</p> <p>The View</p> <p style="padding-left: 20px;">ExternalFilePath of <i>augmented by</i> ExternalFile</p>

SvcV-9 Services Technology Forecast
<p>DoDAF Description: This view identifies the emerging technologies, software/hardware products, and skills that are expected to be available in a given set of time frames and that will affect future service development.</p>
<p>Implementation</p> <p>Architecture</p> <p style="padding-left: 20px;">Relationships</p> <p style="padding-left: 40px;">Name, Description, of <i>composed of</i> Component (type = Family of Systems/System Architecture/ System of Systems)</p> <p style="padding-left: 40px;">Name, Description of <i>built from</i> Component (type = Service)</p> <p>The View</p> <p style="padding-left: 20px;">ExternalFilePath of <i>augmented by</i> ExternalFile</p>

DoDAF 2.0 Viewpoint Definitions

SvcV-10a Services Rules Model
<p>DoDAF Description: This view is one of three viewpoints used to describe service functionality. It identifies constraints that are imposed on services functionality due to some aspect of service design or implementation.</p>
<p>Implementation Architecture Relationships Name, Description, of <i>composed of</i> Component (type = Family of Systems/Systems Architecture/System of Systems) Architecture/System of Systems Name, Description of <i>built from</i> Component (type = Service) Name of <i>performs</i>¹ Function Name, Description of <i>based on / specified by</i> Requirement² Name, Description of <i>connected to</i> Component Name, Description of <i>joins to</i> Interface Name, Description of <i>inputs, outputs, triggered by</i> Item Name, Description of <i>connected to</i> Link Name, Description of <i>exhibited by to</i> State, Mode</p> <p>1 <i>performs</i> Behavior Type: = Integrated (Services) 2 <i>documented by</i> Document (type = Guidance or type = Standard)</p>

SvcV-10b Services State Transition Description
<p>This view is one of three viewpoints used to describe service functionality. It identifies responses of services to events.</p>
<p>Implementation Architecture Relationships <i>composed of</i> Component (type = Family of Systems/System Architecture/ System of Systems) <i>built from</i> Component (type = Service) Name, Description, <i>augmented by</i> ExternalFile of <i>exhibits</i> State Name, Description, <i>augmented by</i> ExternalFile of <i>includes</i> State</p>

SvcV-10c Services Event-Trace Description
<p>This view is one of three viewpoints used to describe service functionality. It identifies service-specific refinements of critical sequences of events described in the Operational Viewpoint.</p>
<p>Implementation Architecture Relationships <i>composed of</i> Component (type = Family of Systems/System Architecture/ System of Systems) <i>built from</i> Component (type = Service) Name, Description of <i>performs</i>¹ Function Name <i>inputs/triggered by/outputs</i> Item</p> <p>1 <i>performs</i> behaviorType = Integrated (Services)</p>



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