Schema **ivef1.xsd**

schema location: \\projsrvr\isis\develop\ivef-sdk\trunk\doc\ivef1.xsd
attribute form default:
element form default: **qualified**
targetNamespace: **urn:http://www.ivef.org/XMLSchema/IVEF/1.1**

Elements

element **Header**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

used by
- elements **MSG_LoginRequest** **MSG_LoginResponse** **MSG_Logout** **MSG_Ping** **MSG_Pong** **MSG_ServerStatus** **MSG_ServiceRequest** **MSG_VesselData**

attributes

Name	Type	Use	Default	Fixed	Annotation
Version	**xs:string**	required			
MsgRefId	**derived by:** **xs:string**	required			documentation: Must be an Universally Unique Identifier

element **LoginRequest**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

used by
- element **MSG_LoginRequest/Body**

attributes

Name	Type	Use	Default	Fixed	Annotation
Name	**derived by:**	required			documentation

	Password	**xs:string derived by: xs:string**	required			Login name documentation Password value
	Encryption	**derived by: xs:integer**	required			documentation 1 = plain 2 = md5

element **LoginResponse**

diagram

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

used by element **MSG_LoginResponse/Body**

attributes

Name	Type	Use	Default	Fixed	Annotation
MsgId	**derived by: xs:string**	required			documentation Corresponds to the original MsgRefId from the Login.xml message
Result	**derived by: xs:integer**	required			documentation 1 = Accepted 2 = Declined
Reason	**derived by: xs:string**	optional			documentation String describing reason for declining, only used when result is "Declined"

element **Logout**

diagram

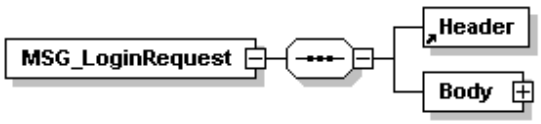
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

annotation documentation
Logout element node

element **MSG_LoginRequest**

diagram

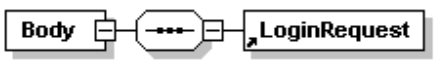


namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

children **Header** **Body**

element **MSG_LoginRequest/Body**

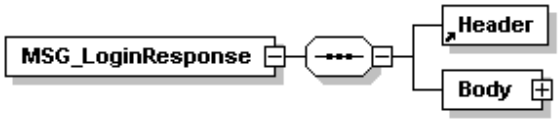
diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex

children **LoginRequest**

element **MSG_LoginResponse**

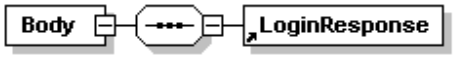
diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
content complex

children **Header** **Body**

element **MSG_LoginResponse/Body**

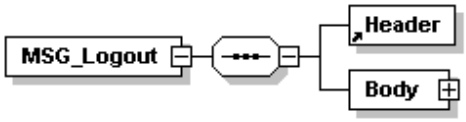
diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex

children **LoginResponse**

element **MSG_Logout**

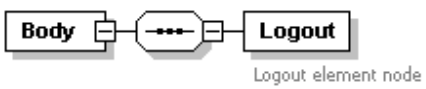
diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
content complex

children **Header** **Body**

element **MSG_Logout/Body**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex

children **Logout**

element **MSG_Logout/Body/Logout**

diagram

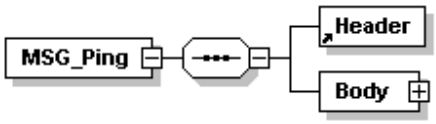
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties isRef 0

annotation documentation
Logout element node

element **MSG_Ping**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

children **Header** **Body**

element **MSG_Ping/Body**

diagram

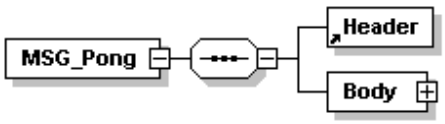
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties isRef 0
content complex

children **Ping**

element **MSG_Pong**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

children **Header** **Body**

element **MSG_Pong/Body**

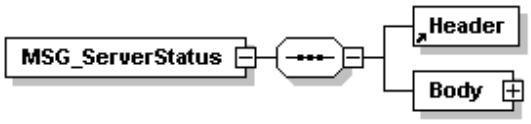
diagram

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex
children **Pong**

element **MSG_ServerStatus**

diagram



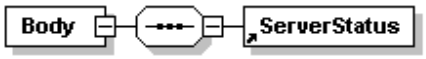
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
content complex

children **Header** **Body**

element **MSG_ServerStatus/Body**

diagram



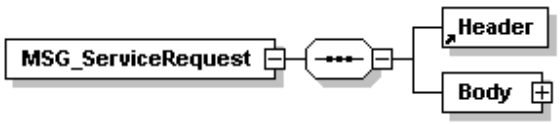
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex

children **ServerStatus**

element **MSG_ServiceRequest**

diagram



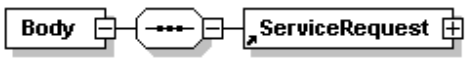
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
content complex

children **Header** **Body**

element **MSG_ServiceRequest/Body**

diagram



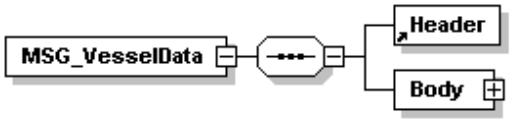
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
isRef 0
content complex

children **ServiceRequest**

element **MSG_VesselData**

diagram



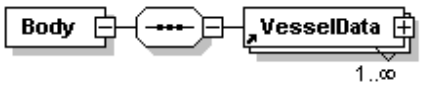
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

children **Header** **Body**

element **MSG_VesselData/Body**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- isRef 0
- content complex

children **VesselData**

element **Ping**

diagram

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

used by
- element **MSG_Ping/Body**

attributes

Name	Type	Use	Default	Fixed	Annotation
TimeStamp	**xs:dateTime**	required			documentation: Date and time in ISO 8601 UTC format (YYYY-MM-DDThh:mm:ss.sss) of the time this message is sent.

element **Pong**

diagram

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

used by
- element **MSG_Pong/Body**

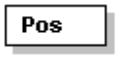
attributes

Name	Type	Use	Default	Fixed	Annotation
TimeStamp	**xs:dateTime**	required			documentation: Date and time in ISO 8601 UTC format

						(YYYY-MM-DDThh:mm:ss.sss) of the time this message is sent.
	MsgId	**derived by: xs:string**	required			documentation Corresponds to the original MsgRefId from the Ping.xml message
	SourceId	**xs:integer**	required			documentation The identification of the node who created this message

element **Pos**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

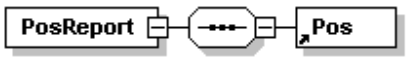
properties content complex

used by elements **ServiceRequest/Area** **PosReport**

attributes

Name	Type	Use	Default	Fixed	Annotation
Lat	**derived by: xs:decimal**	required			documentation Latitude (WGS84) in degrees. (+/- 90 degrees; North = positive; South = negative) Examples: -90deg (south) = -90.00000000deg0min1sec (north) = 0.0000016 50deg50min (north) = 50.8333333
Long	**derived by: xs:decimal**	required			documentation Longitude (WGS84) in degrees. (+/- 180 degrees; East = positive; West = negative). Examples: -180deg (west) = -180.00000000deg0min1sec (east) = 0.0000016

element **PosReport**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

children **Pos**

used by element **VesselData**

attributes

Name	Type	Use	Default	Fixed	Annotation
Id	**xs:integer**	required			documentation The identification of this track
SourceId	**xs:integer**	required			documentation The identification of the node who initially created this message
UpdateTime	**xs:dateTime**	required			documentation Date and time in ISO 8601 UTC format (YYYY-MM-DDThh:mm:ss.sss) this position was measured.
SOG	**derived by: xs:decimal**	required			documentation Speed over ground in meters per second
COG	**derived by: xs:decimal**	required			documentation Course over ground in degrees. (0-360)
Lost	**derived by: xs:string**	required			documentation 'yes' or 'no'
RateOfTurn	**xs:decimal**	optional			documentation Rate of turn in degrees per minute
Orientation	**derived by: xs:decimal**	optional			documentation Orientation of the target in degrees
Length	**derived by: xs:decimal**	optional			documentation Length of the target in meter
Breadth	**derived by: xs:decimal**	optional			documentation Breadth of the target in meter
Altitude	**xs:decimal**	optional			documentation The altitude of the target above the WGS-84 ellipsoid in meters
NavStatus	**derived by: xs:integer**	optional			documentation Navigation

						status of the target 0 = under way using engine 1 = at anchor 2 = not under command 3 = restricted manoeuvrability 4 = constrained by her draught 5 = moored 6 = aground 7 = engaged in fishing 8 = under way sailing 9 - 14 = reserved for future use 15 = undefined default
	UpdSensorType	**derived by: xs:integer**	optional			documentation Type of detection or track type: 1 = radar 2 = ais 3 = ais+radar 4 = deadreckoning
	ATONOffPos	**xs:boolean**	optional			documentation "1" or "0". Indicates whether or not the ATON is on position or not

element **ServerStatus**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

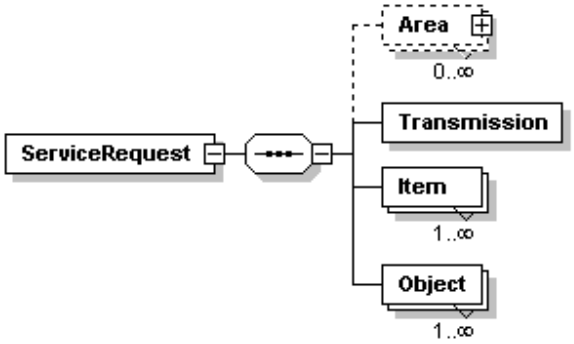
used by element **MSG_ServerStatus/Body**

attributes

Name	Type	Use	Default	Fixed	Annotation
Status	**derived by: xs:string**	required			documentation Status of the server
Details	**derived by: xs:string**	optional			documentation Details of status

element **ServiceRequest**

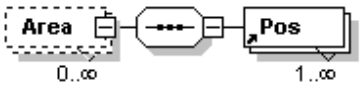
diagram



namespace	urn:http://www.ivef.org/XMLSchema/IVEF/1.1
properties	content complex
children	**Area** **Transmission** **Item** **Object**
used by	element **MSG_ServiceRequest/Body**

element **ServiceRequest/Area**

diagram



namespace	urn:http://www.ivef.org/XMLSchema/IVEF/1.1
properties	isRef 0 minOcc 0 maxOcc unbounded content complex
children	**Pos**

element **ServiceRequest/Transmission**

diagram

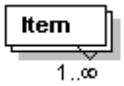
namespace	urn:http://www.ivef.org/XMLSchema/IVEF/1.1
properties	isRef 0 content complex

attributes

Name	Type	Use	Default	Fixed	Annotation
Type	**derived by: xs:integer**	required			documentation Type of transmission, possible values are: 1 = single occurrence 2 = periodic 3 = synchronic 4 = on change
Period	**xs:decimal**	optional			documentation Specifies he time between two periodic updates in

seconds

element **ServiceRequest/Item**

diagram 

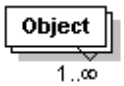
namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- isRef 0
- minOcc 1
- maxOcc unbounded
- content complex

attributes

Name	Type	Use	Default	Fixed	Annotation
Element	**derived by: xs:integer**	required			documentation Describes requested Vessel data element, possible values: 1 = position 2 = static data 3 = voyage
Field	**xs:string**	required			documentation Selected field. Can be 'all' or one of the items of vessel data PositionReport , Static Data or Voyage

element **ServiceRequest/Object**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- isRef 0
- minOcc 1
- maxOcc unbounded
- content complex

attributes

Name	Type	Use	Default	Fixed	Annotation
FileName		required			documentation Name of the filter. The filter can be a predefined selector or can be defined here in the future. One of the predefined selectors will be 'all'

element **StaticData**

diagram 

namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties
- content complex

used by
- element **VesselData**

attributes

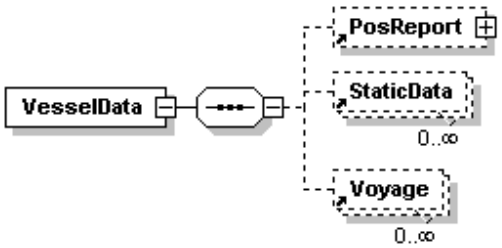
Name	Type	Use	Default	Fixed	Annotation
Id	**derived by: xs:string**	required			documentation: The identification of this static data
SourceName	**xs:string**	required			documentation: Identification of the originator of the data
Source	**derived by: xs:integer**	required			documentation: Source/originator type: 1 = transponder 2 = database 3 = manual
Length	**derived by: xs:decimal**	optional			documentation: Length of the target in meter
Breadth	**derived by: xs:decimal**	optional			documentation: Breadth of the target in meter
Callsign	**xs:string**	optional			documentation: Callsign of the target
ShipName	**derived by: xs:string**	optional			documentation: Name of the target
ObjectType	**derived by: xs:integer**	optional			documentation: 1 = Aircraft 2 = Vessel 3 = Vehicle (not an aircraft or vessel) 4 = BaseStation 5 = Aids to Navigate 6 = Virtual Aids to Navigate 7 = Field Transponder
ShipType	**derived by: xs:integer**	optional			documentation: 20 = WIG 30 = fishing vessel 31 = towing vessel 32 = big towing vessel 33 = dredging vessel 34 = diving vessel 35 = military vessel 36 = sailing vessel 37 = pleasure craft 40 = HSC 50 = pilot vessel 51 = SAR 52 = tug

			53 = port tender 54 = anti pollution vessel 55 = law enforcement vessel 58 = medical vessel 59 = mob83 vessel 60 = passenger ship 70 = cargo ship 80 = tanker 90 = other types of ship
IMO	**xs:integer**	optional	documentation IMO number of the target
MMSI	**xs:integer**	optional	documentation MMSI number of the target
ATONType	**derived by: xs:integer**	optional	documentation 0 = Unknown 1 = Unknown fixed 2 = Unknown floating 3 = Fixed off shore structure 5 = Light, without sectors 6 = Light, with sectors 7 = Leading Light Front 8 = Leading Light Rear 9 = Beacon, Cardinal N 10 = Beacon, Cardinal E 11 = Beacon, Cardinal S 12 = Beacon, Cardinal W 13 = Beacon, Port hand 14 = Beacon, Starboard hand 15 = Beacon, Preferred Channel port hand 16 = Beacon, Preferred Channel starboard hand 17 = Beacon, Isolated danger 18 = Beacon, Safe water 19 = Beacon, Special mark 20 = Cardinal

			Mark N 21 = Cardinal Mark E 22 = Cardinal Mark S 23 = Cardinal Mark W 24 = Port hand Mark 25 = Starboard hand Mark 26 = Preferred Channel Port hand 27 = Preferred Channel Starboard hand 28 = Isolated danger 29 = Safe Water 30 = Special Mark 31 = Light Vessel / LANBY/Rigs 32 = Reference point 33 = RACON
ATONName	**xs:string**	optional	documentation Name of Aids-to-navigation
AntPosDistFromFront	**xs:decimal**	optional	documentation GPS Antenna position distance from front in meters
AntPosDistFromLeft	**xs:decimal**	optional	documentation GPS Antenna position distance from left in meters
NatLangShipName	**xs:string**	optional	documentation The name of the vessel in native language
PortOfRegistry	**xs:string**	optional	documentation Port Of Registry
CountryFlag	**xs:string**	optional	documentation The country flag
MaxAirDraught	**derived by: xs:decimal**	optional	documentation Maximum air draught of the vessel in meters
MaxDraught	**derived by: xs:decimal**	optional	documentation Maximum draught of the vessel in meters
DeepWaterVesselind	**derived by: xs:string**	optional	documentation "yes" or "no"

element **VesselData**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

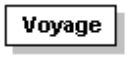
properties content complex

children **PosReport** **StaticData** **Voyage**

used by element **MSG_VesselData/Body**

element **Voyage**

diagram



namespace urn:http://www.ivef.org/XMLSchema/IVEF/1.1

properties content complex

used by element **VesselData**

attributes

Name	Type	Use	Default	Fixed	Annotation
Id	**derived by: xs:string**	required			documentation The identification of this voyage
SourceName	**xs:string**	required			documentation Identification of the originator of this data
Source	**derived by: xs:integer**	required			documentation Source/originator type: 1 = transponder 2 = database 3 = manual
CargoType	**derived by: xs:integer**	optional			documentation 0 = All ships of this type 1 = Carrying DG, HS, or MP, IMO hazard or pollutant category A 2 = Carrying DG, HS, or MP, IMO hazard or pollutant category B 3 = Carrying DG, HS, or MP, IMO hazard or pollutant category C 4 = Carrying

			DG, HS, or MP, IMO hazard or pollutant category D 9 = No additional information
Destination	**xs:string**	optional	documentation Destination of the target
ETA	**xs:dateTime**	optional	documentation Date and time in ISO 8601 UTC format (YYYY-MM-DDThh:mm:ss.sss) of the Expected Time Of Arrival of the target.
ATA	**xs:dateTime**	optional	documentation Date and time in ISO 8601 UTC format (YYYY-MM-DDThh:mm:ss.sss) of the Actual Time Of Arrival of the target.
AirDraught	**derived by: xs:decimal**	optional	documentation Actual air draught of the vessel in meters
Draught	**derived by: xs:decimal**	optional	documentation Actual draught of the vessel in meters