

Climate Capability Details - VSS Alignment

Link to VSS Files

https://github.com/COVESA/vehicle_signal_specification/blob/master/spec/Cabin/HVAC.vspec

https://github.com/COVESA/vehicle_signal_specification/blob/master/spec/Cabin/SingleHVACStation.vspec

Climate Data Capabilities

Data Capability Name	Data Type	VSS Alignment			Android VHAL Alignment		
		Data Element Names	Element Data Type	VSS Values	Possible Interface	Data Elements	Element Data Type
Provide On/Off State of HVAC system					HVAC_POWER_ON		
Provide On/Off State of Air Conditioning System	boolean	IsAirConditioningActive	boolean	True/False	HVAC_AC_ON		
Provide On/Off State of Air Recirculation	boolean	IsRecirculationActive	boolean	True/False	HVAC_RECIRC_ON		
Provide On/Off State of Front Defroster	boolean	IsFrontDefrosterActive	boolean	True/False	HVAC_MAX_DEFROST_ON		
Provide On/Off State of Rear Defroster	boolean	IsRearDefrosterActive	boolean	True/False			
Provide Estimated Cabin Air Temperature	boolean	AmbientAirTemperature	float	degrees celsius	HVAC_TEMPERATURE_CURRENT		
Provide Temperature per zone (HVAC Station)	Structure	Station	Enumeration	- Row[1,4] - ["Driver","Passenger"]			
		Temperature	float	degrees Celsius	HVAC_TEMPERATURE_SET		
Provide Fan Speed per zone (HVAC Station)	Structure	Station	Enumeration	- Row[1,4] - ["Driver","Passenger"]			
		FanSpeed	uint8	Percentage 0 to 100 0 = off, 100 = max	HVAC_FAN_SPEED		
Provide Air Distribution per zone (HVAC Station)	Structure	Station	Enumeration	- Row[1,4] - ["Driver","Passenger"]			
		AirDistribution	Enumeration	['UP', 'MIDDLE', 'DOWN']	HVAC_FAN_DIRECTION		
Provide All Climate Settings per Zone (HVAC Station)	Array of Structure	Station	Enumeration	- Row[1,4] - ["Driver","Passenger"]			
		Temperature	float	degrees Celsius			
		FanSpeed	uint8	Percentage 0 to 100 0 = off, 100 = max			
		AirDistribution	Enumeration	['UP', 'MIDDLE', 'DOWN']			
		IsStationPresent (not in VSS)	boolean	True/False Is the Station present in THIS vehicle			
					HVAC_AUTO_ON?		

Climate Control Capabilities

Data Capability Name	VSS Alignment			Android VHAL Alignment		
	Parameters / Arguments	Data Type	VSS Values	Possible Interface	Parameters / Arguments	Data Type

Control On/Off State of HVAC system				HVAC_POWER_ON		
Control On/Off State of Air Conditioning System				HVAC_AC_ON		
Control On/Off State of Air Recirculation	IsRecirculationActive	boolean	True/False	HVAC_RECIRC_ON		
Control On/Off State of Front Defroster	IsFrontDefrosterActive	boolean	True/False	HVAC_MAX_DEFROST_ON		
Control On/Off State of Rear Defroster	IsRearDefrosterActive	boolean	True/False			
Control Temperature for a zone (HVAC Station)	Station	Enumeration	- Row[1,4] - ["Driver", "Passenger"]			
	Temperature	float	degrees Celsius	HVAC_TEMPERATURE_SET		
Control Fan Speed for a zone (HVAC Station)	Station	Enumeration	- Row[1,4] - ["Driver", "Passenger"]			
	FanSpeed	uint8	Percentage 0 to 100 0 = off, 100 = max	HVAC_FAN_SPEED		
Control Air Distribution for a zone (HVAC Station)	Station	Enumeration	- Row[1,4] - ["Driver", "Passenger"]			
	AirDistribution	Enumeration	['UP', 'MIDDLE', 'DOWN']	HVAC_FAN_DIRECTION		
Control All Climate Settings for a Zone	Station	Enumeration	- Row[1,4] - ["Driver", "Passenger"]			
	Temperature	float	degrees Celsius			
	FanSpeed	uint8	Percentage 0 to 100 0 = off, 100 = max			
	AirDistribution	Enumeration	['UP', 'MIDDLE', 'DOWN']			