



## **Network Functions Virtualisation (NFV) Release 3; Protocols and Data Models; RESTful protocols specification for the management of NFV-MANO**

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# Contents

Intellectual Property Rights .....	12
Foreword.....	12
Modal verbs terminology.....	12
1 Scope .....	13
2 References .....	13
2.1 Normative references .....	13
2.2 Informative references.....	14
3 Definition of terms, symbols and abbreviations.....	15
3.1 Terms.....	15
3.2 Symbols.....	15
3.3 Abbreviations .....	15
4 General aspects.....	15
4.1 Overview .....	15
4.2 NFV-MANO management concepts .....	16
4.2.1 Introduction.....	16
4.2.2 NFV-MANO functional entity composition .....	16
4.2.2.1 NFV-MANO functional entity .....	16
4.2.2.2 NFV-MANO service .....	17
4.2.2.3 NFV-MANO service interface .....	18
4.2.2.4 NFV-MANO functional entity application and NFV-MANO functional entity components .....	18
4.2.3 Peer functional entity and consumed NFV-MANO interfaces .....	18
4.2.4 Consumption of NFV-MANO management APIs.....	20
4.3 Common data types .....	20
4.3.1 General.....	20
4.3.2 Structured data types.....	20
4.3.2.1 Introduction .....	20
4.3.2.2 Type: ManoEntitySubscriptionFilter .....	20
4.3.2.3 Type: ManoManagedObjectReference.....	21
4.3.3 Simple data types and enumerations.....	22
4.3.3.1 Introduction .....	22
4.3.3.2 Simple data types .....	22
4.3.3.3 Enumerations .....	22
5 NFV-MANO Configuration and Information Management interface .....	23
5.1 Description .....	23
5.2 API version.....	23
5.3 Resource structure and method .....	23
5.4 Sequence diagrams .....	25
5.4.1 Flow of the Read Config Info operation .....	25
5.4.2 Flow of the Modify Config operation.....	26
5.4.3 Flow of subscriptions management .....	26
5.4.4 Flow of sending notifications.....	29
5.4.5 Flow of changing the state of a managed entity.....	29
5.4.6 Flow of managing information and configuration with regards to peer functional entity .....	31
5.5 Resources .....	34
5.5.1 Introduction.....	34
5.5.2 Resource: API versions.....	34
5.5.3 Resource: NFV-MANO entity .....	34
5.5.3.1 Description .....	34
5.5.3.2 Resource definition .....	34
5.5.3.3 Resource methods .....	34
5.5.3.3.1 POST .....	34
5.5.3.3.2 GET .....	35
5.5.3.3.3 PUT .....	35
5.5.3.3.4 PATCH.....	35

5.5.3.3.5	DELETE .....	36
5.5.4	Resource: Subscriptions .....	36
5.5.4.1	Description .....	36
5.5.4.2	Resource definition .....	36
5.5.4.3	Resource methods .....	37
5.5.4.3.1	POST .....	37
5.5.4.3.2	GET .....	38
5.5.4.3.3	PUT .....	39
5.5.4.3.4	PATCH .....	39
5.5.4.3.5	DELETE .....	39
5.5.5	Resource: Individual subscription .....	40
5.5.5.1	Description .....	40
5.5.5.2	Resource definition .....	40
5.5.5.3	Resource methods .....	40
5.5.5.3.1	POST .....	40
5.5.5.3.2	GET .....	40
5.5.5.3.3	PUT .....	41
5.5.5.3.4	PATCH .....	41
5.5.5.3.5	DELETE .....	41
5.5.6	Resource: Notification endpoint .....	42
5.5.6.1	Description .....	42
5.5.6.2	Resource definition .....	42
5.5.6.3	Resource methods .....	42
5.5.6.3.1	POST .....	42
5.5.6.3.2	GET .....	42
5.5.6.3.3	PUT .....	43
5.5.6.3.4	PATCH .....	43
5.5.6.3.5	DELETE .....	43
5.5.7	Resource: Change NFV-MANO entity state task .....	43
5.5.7.1	Description .....	43
5.5.7.2	Resource definition .....	43
5.5.7.3	Resource methods .....	44
5.5.7.3.1	POST .....	44
5.5.7.3.2	GET .....	44
5.5.7.3.3	PUT .....	44
5.5.7.3.4	PATCH .....	45
5.5.7.3.5	DELETE .....	45
5.5.8	Resource: Change state operation occurrences .....	45
5.5.8.1	Description .....	45
5.5.8.2	Resource definition .....	45
5.5.8.3	Resource methods .....	45
5.5.8.3.1	POST .....	45
5.5.8.3.2	GET .....	45
5.5.8.3.3	PUT .....	47
5.5.8.3.4	PATCH .....	47
5.5.8.3.5	DELETE .....	48
5.5.9	Resource: Individual change state operation occurrence .....	48
5.5.9.1	Description .....	48
5.5.9.2	Resource definition .....	48
5.5.9.3	Resource methods .....	48
5.5.9.3.1	POST .....	48
5.5.9.3.2	GET .....	48
5.5.9.3.3	PUT .....	49
5.5.9.3.4	PATCH .....	49
5.5.9.3.5	DELETE .....	49
5.5.10	Resource: NFV-MANO service interfaces .....	49
5.5.10.1	Description .....	49
5.5.10.2	Resource definition .....	49
5.5.10.3	Resource methods .....	50
5.5.10.3.1	POST .....	50
5.5.10.3.2	GET .....	50
5.5.10.3.3	PUT .....	51

5.5.10.3.4	PATCH.....	51
5.5.10.3.5	DELETE.....	52
5.5.11	Resource: Individual NFV-MANO service interface .....	52
5.5.11.1	Description .....	52
5.5.11.2	Resource definition .....	52
5.5.11.3	Resource methods .....	52
5.5.11.3.1	POST .....	52
5.5.11.3.2	GET .....	52
5.5.11.3.3	PUT .....	53
5.5.11.3.4	PATCH.....	53
5.5.11.3.5	DELETE.....	54
5.5.12	Resource: Change interface state task.....	54
5.5.12.1	Description .....	54
5.5.12.2	Resource definition .....	55
5.5.12.3	Resource methods .....	55
5.5.12.3.1	POST .....	55
5.5.12.3.2	GET .....	56
5.5.12.3.3	PUT .....	56
5.5.12.3.4	PATCH.....	56
5.5.12.3.5	DELETE.....	56
5.5.13	Resource: Peer entities .....	56
5.5.13.1	Description .....	56
5.5.13.2	Resource definition .....	57
5.5.13.3	Resource methods .....	57
5.5.13.3.1	POST .....	57
5.5.13.3.2	GET .....	58
5.5.13.3.3	PUT .....	59
5.5.13.3.4	PATCH.....	59
5.5.13.3.5	DELETE.....	60
5.5.14	Resource: Individual peer entity .....	60
5.5.14.1	Description .....	60
5.5.14.2	Resource definition .....	60
5.5.14.3	Resource methods .....	60
5.5.14.3.1	POST .....	60
5.5.14.3.2	GET .....	60
5.5.14.3.3	PUT .....	61
5.5.14.3.4	PATCH.....	61
5.5.14.3.5	DELETE.....	62
5.6	Data model .....	63
5.6.1	Introduction.....	63
5.6.2	Resource and notification data types .....	63
5.6.2.1	Introduction.....	63
5.6.2.2	Type: ManoEntity .....	63
5.6.2.3	Type: ManoConfigModificationRequest .....	65
5.6.2.4	Type: ManoConfigModifications .....	66
5.6.2.5	Type: CimSubscriptionRequest .....	67
5.6.2.6	Type: CimSubscription .....	67
5.6.2.7	Type: InformationChangedNotification .....	67
5.6.2.8	Type: ChangeStateRequest .....	68
5.6.2.9	Type: ChangeStateOpOcc .....	69
5.6.2.10	Type: ChangeStateNotification .....	70
5.6.2.11	Type: ManoServiceInterface .....	70
5.6.2.12	Type: ManoServiceInterfaceModificationRequest .....	72
5.6.2.13	Type: ManoServiceInterfaceModifications .....	73
5.6.2.14	Type: CreatePeerEntityRequest .....	73
5.6.2.15	Type: PeerEntity .....	74
5.6.2.16	Type: PeerEntityConfigModificationRequest .....	75
5.6.2.17	Type: PeerEntityConfigModifications .....	76
5.6.3	Referenced structured data types .....	76
5.6.3.1	Introduction .....	76
5.6.3.2	Type: ManoEntityComponent .....	77
5.6.3.3	Type: ManoService .....	77

5.6.3.4	Type: NfvoSpecificInfo .....	77
5.6.3.5	Type: VnfmSpecificInfo .....	78
5.6.3.6	Type: VimSpecificInfo.....	79
5.6.3.7	Type: ManoEntityConfigurableParams.....	79
5.6.3.8	Type: ConsumedManoInterfaceInfo .....	79
5.6.3.9	Type: CimNotificationsFilter .....	80
5.6.3.10	Type: ClockSyncInfo .....	81
5.6.3.11	Type: ServerInterfaceSecurityInfo .....	81
5.6.3.12	Type: ClientInterfaceSecurityInfo.....	82
5.6.4	Referenced simple data types and enumerations .....	83
5.6.4.1	Introduction.....	83
5.6.4.2	Simple data types .....	83
5.6.4.3	Type: ManoServiceInterfaceTypeShortName.....	83
5.6.4.4	Enumeration: OperationalStateEnumType.....	85
5.6.4.5	Enumeration: AdministrativeStateEnumType .....	86
5.6.4.6	Enumeration: UsageStateEnumType .....	86
5.6.4.7	Enumeration: ChangeOperationalStateEnumType .....	86
5.6.4.8	Enumeration: ChangeAdministrativeStateEnumType .....	86
5.6.4.9	Enumeration: InterfaceOperationalStateEnumType.....	86
5.6.4.10	Enumeration: StopEnumType .....	87
5.6.4.11	Enumeration: ChangeStateOpOccStateEnumType .....	87
5.6.4.12	Enumeration: ManoEntityEnumType .....	87
5.6.4.13	Enumeration: PeerEntityEnumType.....	87
5.7	States and state transitions of an NFV-MANO functional entity .....	88
5.7.1	Introduction.....	88
5.7.2	States overview .....	89
5.7.2.1	Operational state .....	89
5.7.2.2	Administrative state .....	89
5.7.2.3	Usage state .....	90
5.7.3	State operations.....	90
5.7.3.1	Operational state changes and interface operations.....	90
5.7.3.2	Administrative state changes and interface operations .....	91
6	NFV-MANO Performance Management interface .....	92
6.1	Description .....	92
6.2	API version.....	92
6.3	Resource structure and method .....	92
6.4	Sequence diagrams .....	93
6.4.1	Flow of creating a PM job .....	93
6.4.2	Flow of querying/reading PM jobs .....	94
6.4.3	Flow of deleting a PM job .....	95
6.4.4	Flow of obtaining performance reports.....	95
6.4.5	Flow of creating a threshold .....	96
6.4.6	Flow of querying/reading thresholds .....	96
6.4.7	Flow of deleting thresholds.....	97
6.4.8	Flow of managing subscriptions .....	98
6.4.9	Flow of sending notifications.....	100
6.5	Resources .....	100
6.5.1	Introduction.....	100
6.5.2	Resource: API versions.....	100
6.5.3	Resource: PM jobs .....	101
6.5.3.1	Description .....	101
6.5.3.2	Resource definition .....	101
6.5.3.3	Resource methods .....	101
6.5.3.3.1	POST .....	101
6.5.3.3.2	GET .....	102
6.5.3.3.3	PUT .....	103
6.5.3.3.4	PATCH.....	103
6.5.3.3.5	DELETE.....	103
6.5.4	Resource: Individual PM job .....	104
6.5.4.1	Description .....	104
6.5.4.2	Resource definition .....	104

6.5.4.3	Resource methods .....	104
6.5.4.3.1	POST .....	104
6.5.4.3.2	GET .....	104
6.5.4.3.3	PUT .....	105
6.5.4.3.4	PATCH .....	105
6.5.4.3.5	DELETE .....	105
6.5.5	Resource: Individual performance report .....	105
6.5.5.1	Description .....	105
6.5.5.2	Resource definition .....	105
6.5.5.3	Resource methods .....	106
6.5.5.3.1	POST .....	106
6.5.5.3.2	GET .....	106
6.5.5.3.3	PUT .....	106
6.5.5.3.4	PATCH .....	106
6.5.5.3.5	DELETE .....	106
6.5.6	Resource: Thresholds .....	107
6.5.6.1	Description .....	107
6.5.6.2	Resource definition .....	107
6.5.6.3	Resource methods .....	107
6.5.6.3.1	POST .....	107
6.5.6.3.2	GET .....	108
6.5.6.3.3	PUT .....	109
6.5.6.3.4	PATCH .....	109
6.5.6.3.5	DELETE .....	109
6.5.7	Resource: Individual threshold .....	109
6.5.7.1	Description .....	109
6.5.7.2	Resource definition .....	109
6.5.7.3	Resource methods .....	109
6.5.7.3.1	POST .....	109
6.5.7.3.2	GET .....	109
6.5.7.3.3	PUT .....	110
6.5.7.3.4	PATCH .....	110
6.5.7.3.5	DELETE .....	110
6.5.8	Resource: Subscriptions .....	110
6.5.8.1	Description .....	110
6.5.8.2	Resource definition .....	111
6.5.8.3	Resource methods .....	111
6.5.8.3.1	POST .....	111
6.5.8.3.2	GET .....	112
6.5.8.3.3	PUT .....	113
6.5.8.3.4	PATCH .....	113
6.5.8.3.5	DELETE .....	113
6.5.9	Resource: Individual subscription .....	114
6.5.9.1	Description .....	114
6.5.9.2	Resource definition .....	114
6.5.9.3	Resource methods .....	114
6.5.9.3.1	POST .....	114
6.5.9.3.2	GET .....	114
6.5.9.3.3	PUT .....	115
6.5.9.3.4	PATCH .....	115
6.5.9.3.5	DELETE .....	115
6.5.10	Resource: Notification endpoint .....	116
6.5.10.1	Description .....	116
6.5.10.2	Resource definition .....	116
6.5.10.3	Resource methods .....	116
6.5.10.3.1	POST .....	116
6.5.10.3.2	GET .....	117
6.5.10.3.3	PUT .....	117
6.5.10.3.4	PATCH .....	117
6.5.10.3.5	DELETE .....	117
6.6	Data model .....	117
6.6.1	Introduction .....	117

6.6.2	Resource and notification data types .....	117
6.6.2.1	Introduction .....	117
6.6.2.2	Type: PmSubscriptionRequest .....	118
6.6.2.3	Type: PmSubscription .....	118
6.6.2.4	Type: ThresholdCrossedNotification .....	118
6.6.2.5	Type: PerformanceInformationAvailableNotification .....	119
6.6.2.6	Type: CreatePmJobRequest .....	120
6.6.2.7	Type: PmJob .....	121
6.6.2.8	Type: CreateThresholdRequest .....	122
6.6.2.9	Type: Threshold .....	122
6.6.2.10	Type: PerformanceReport .....	123
6.6.3	Referenced structured data types .....	123
6.6.3.1	Introduction .....	123
6.6.3.2	Type: PmNotificationsFilter .....	124
6.6.3.3	Type: PmJobCriteria .....	124
6.6.3.4	Type: ThresholdCriteria .....	125
6.6.4	Referenced simple data types and enumerations .....	125
6.6.4.1	Introduction .....	125
6.6.4.2	Simple data types .....	125
6.6.4.3	Enumeration: CrossingDirectionType .....	125
7	NFV-MANO Fault Management interface .....	126
7.1	Description .....	126
7.2	API version .....	126
7.3	Resource structure and method .....	126
7.4	Sequence diagrams .....	127
7.4.1	Flow of the Get Alarm List operation .....	127
7.4.2	Flow of acknowledging alarm .....	128
7.4.3	Flow of managing subscriptions .....	129
7.4.4	Flow of sending notifications .....	131
7.5	Resources .....	131
7.5.1	Introduction .....	131
7.5.2	Resource: API versions .....	131
7.5.3	Resource: Alarms .....	131
7.5.3.1	Description .....	131
7.5.3.2	Resource definition .....	132
7.5.3.3	Resource methods .....	132
7.5.3.3.1	POST .....	132
7.5.3.3.2	GET .....	132
7.5.3.3.3	PUT .....	133
7.5.3.3.4	PATCH .....	133
7.5.3.3.5	DELETE .....	133
7.5.4	Resource: Individual alarm .....	133
7.5.4.1	Description .....	133
7.5.4.2	Resource definition .....	134
7.5.4.3	Resource methods .....	134
7.5.4.3.1	POST .....	134
7.5.4.3.2	GET .....	134
7.5.4.3.3	PUT .....	134
7.5.4.3.4	PATCH .....	135
7.5.4.3.5	DELETE .....	135
7.5.5	Resource: Subscriptions .....	136
7.5.5.1	Description .....	136
7.5.5.2	Resource definition .....	136
7.5.5.3	Resource methods .....	136
7.5.5.3.1	POST .....	136
7.5.5.3.2	GET .....	137
7.5.5.3.3	PUT .....	138
7.5.5.3.4	PATCH .....	138
7.5.5.3.5	DELETE .....	138
7.5.6	Resource: Individual subscription .....	139
7.5.6.1	Description .....	139

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7.5.6.2	Resource definition .....	139
7.5.6.3	Resource methods .....	139
7.5.6.3.1	POST .....	139
7.5.6.3.2	GET .....	139
7.5.6.3.3	PUT .....	140
7.5.6.3.4	PATCH.....	140
7.5.6.3.5	DELETE.....	140
7.5.7	Resource: Notification endpoint .....	140
7.5.7.1	Description.....	140
7.5.7.2	Resource definition .....	140
7.5.7.3	Resource methods .....	141
7.5.7.3.1	POST .....	141
7.5.7.3.2	GET .....	141
7.5.7.3.3	PUT .....	142
7.5.7.3.4	PATCH.....	142
7.5.7.3.5	DELETE.....	142
7.6	Data model .....	142
7.6.1	Introduction.....	142
7.6.2	Resource and notification data types .....	142
7.6.2.1	Introduction.....	142
7.6.2.2	Type: FmSubscriptionRequest .....	142
7.6.2.3	Type: FmSubscription .....	143
7.6.2.4	Type: Alarm .....	143
7.6.2.5	Type: AlarmNotification .....	144
7.6.2.6	Type: AlarmClearedNotification.....	145
7.6.2.7	Type: AlarmListRebuiltNotification .....	145
7.6.2.8	Type: AlarmModifications.....	146
7.6.3	Referenced structured data types .....	146
7.6.3.1	Introduction.....	146
7.6.3.2	Type: FmNotificationsFilter.....	146
7.6.4	Referenced simple data types and enumerations .....	147
7.6.4.1	Introduction.....	147
7.6.4.2	Simple data types .....	147
7.6.4.3	Enumeration: PerceivedSeverityType.....	147
7.6.4.4	Enumeration: EventType .....	148
8	NFV-MANO Log Management interface.....	148
8.1	Description .....	148
8.2	API version.....	149
8.3	Resource structure and method .....	149
8.4	Sequence diagrams .....	150
8.4.1	Flow of creating a logging job.....	150
8.4.2	Flow of querying/reading logging jobs.....	151
8.4.3	Flow of deleting a logging job.....	151
8.4.4	Flow of obtaining log reports.....	152
8.4.5	Flow of managing subscriptions .....	153
8.4.6	Flow of sending notifications.....	155
8.4.7	Flow of on-demand request to compile log data into file .....	156
8.5	Resources .....	158
8.5.1	Introduction.....	158
8.5.2	Resource: API versions .....	158
8.5.3	Resource: Logging jobs .....	158
8.5.3.1	Description .....	158
8.5.3.2	Resource definition .....	158
8.5.3.3	Resource methods .....	159
8.5.3.3.1	POST .....	159
8.5.3.3.2	GET .....	159
8.5.3.3.3	PUT .....	161
8.5.3.3.4	PATCH.....	161
8.5.3.3.5	DELETE.....	161
8.5.4	Resource: Individual logging job.....	162
8.5.4.1	Description .....	162

8.5.4.2	Resource definition .....	162
8.5.4.3	Resource methods .....	162
8.5.4.3.1	POST .....	162
8.5.4.3.2	GET .....	162
8.5.4.3.3	PUT .....	163
8.5.4.3.4	PATCH.....	163
8.5.4.3.5	DELETE.....	163
8.5.5	Resource: Individual log report .....	163
8.5.5.1	Description.....	163
8.5.5.2	Resource definition .....	163
8.5.5.3	Resource methods .....	164
8.5.5.3.1	POST .....	164
8.5.5.3.2	GET .....	164
8.5.5.3.3	PUT .....	164
8.5.5.3.4	PATCH.....	165
8.5.5.3.5	DELETE.....	165
8.5.6	Resource: Compile log task .....	165
8.5.6.1	Description.....	165
8.5.6.2	Resource definition .....	165
8.5.6.3	Resource methods .....	165
8.5.6.3.1	POST .....	165
8.5.6.3.2	GET .....	167
8.5.6.3.3	PUT .....	167
8.5.6.3.4	PATCH.....	167
8.5.6.3.5	DELETE.....	167
8.5.7	Resource: Subscriptions.....	167
8.5.7.1	Description .....	167
8.5.7.2	Resource definition .....	167
8.5.7.3	Resource methods .....	167
8.5.7.3.1	POST .....	167
8.5.7.3.2	GET .....	168
8.5.7.3.3	PUT .....	169
8.5.7.3.4	PATCH.....	169
8.5.7.3.5	DELETE.....	169
8.5.8	Resource: Individual subscription.....	170
8.5.8.1	Description .....	170
8.5.8.2	Resource definition .....	170
8.5.8.3	Resource methods .....	170
8.5.8.3.1	POST .....	170
8.5.8.3.2	GET .....	170
8.5.8.3.3	PUT .....	171
8.5.8.3.4	PATCH.....	171
8.5.8.3.5	DELETE.....	171
8.5.9	Resource: Notification endpoint .....	172
8.5.9.1	Description .....	172
8.5.9.2	Resource definition .....	172
8.5.9.3	Resource methods .....	172
8.5.9.3.1	POST .....	172
8.5.9.3.2	GET .....	172
8.5.9.3.3	PUT .....	173
8.5.9.3.4	PATCH.....	173
8.5.9.3.5	DELETE.....	173
8.6	Data model .....	173
8.6.1	Introduction.....	173
8.6.2	Resource and notification data types .....	173
8.6.2.1	Introduction.....	173
8.6.2.2	Type: LogmSubscriptionRequest .....	173
8.6.2.3	Type: LogmSubscription .....	174
8.6.2.4	Type: LogReportAvailableNotification .....	174
8.6.2.5	Type: CreateLoggingJobRequest .....	175
8.6.2.6	Type: LoggingJob .....	175
8.6.2.7	Type: LogReport .....	176

8.6.2.8	Type: CompileLogRequest .....	178
8.6.3	Referenced structured data types .....	178
8.6.3.1	Introduction .....	178
8.6.3.2	Type: LoggingJobCriteria .....	178
8.6.3.3	Type: LoggingJobMessagesCriteria .....	179
8.6.3.4	Type: LoggingJobServicesCriteria .....	181
8.6.3.5	Type: LoggingJobSystemCriteria .....	181
8.6.3.6	Type: LoggingJobConfig .....	181
8.6.3.7	Type: LogmNotificationsFilter .....	184
8.6.4	Referenced simple data types and enumerations .....	184

**Annex A (informative):     Mapping operations to protocol elements.....185**

A.1	Overview .....	185
A.2	NFV-MANO configuration and information management interface .....	185
A.3	NFV-MANO performance management interface .....	185
A.4	NFV-MANO fault management interface.....	186
A.5	NFV-MANO log management interface .....	187

**Annex B (informative):     Change History .....188**

History .....	190
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iTeh STANDARD PREVIEW  
(standards.iteh.ai)  
Full standard:  
<https://standards.iteh.ai/catalog/standards/sist/1b294ef2-bf82-4e4a-bd03-d0724311ec0/etsi-gs-nfv-sol-009-v3.3.1-2019-10>

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# Foreword

This Group Specification (GS) has been produced by ETSI Industry Specification Group (ISG) Network Functions Virtualisation (NFV).

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## Modal verbs terminology

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*https://standards.etsi.org/catalog/sist/1294ef2-bfb8-4e4a-bcfd-07243f7e473a/etsi-gs-nfv-sol-009-v3.3.1-2019-10  
Full standard:  
4e4a-bcfd-07243f7e473a/etsi-gs-nfv-sol-009-v3.3.1-2019-10  
Standard Review  
4e4a-bcfd-07243f7e473a/etsi-gs-nfv-sol-009-v3.3.1-2019-10*

# 1 Scope

The present document specifies a set of RESTful protocols and data models fulfilling the requirements specified in ETSI GS NFV-IFA 031 [1] for the interfaces that enable the management of NFV-MANO functional entities.

## 2 References

### 2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference>.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are necessary for the application of the present document.

- [1] ETSI GS NFV-IFA 031: "Network Functions Virtualisation (NFV) Release 3; Management and Orchestration; Requirements and interfaces specification for management of NFV-MANO".
- [2] Recommendation ITU-T X.733: "Information technology - Open Systems Interconnection - Systems Management: Alarm reporting function".
- [3] IETF RFC 7396: "JSON Merge Patch".  
NOTE: Available at <https://tools.ietf.org/html/rfc7396>
- [4] ETSI GS NFV-SOL 013: "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; Specification of common aspects for RESTful NFV MANO APIs".
- [5] ETSI GS NFV-SEC 022: "Network Functions Virtualisation (NFV) Release 2; Security; Access Token Specification for API Access".
- [6] IETF RFC 8447: "IANA Registry Updates for TLS and DTLS".  
NOTE: Available at <https://tools.ietf.org/html/rfc8447>.
- [7] IETF RFC 7231: "Hypertext Transfer Protocol (HTTP/1.1): Semantics and Content".  
NOTE: Available at <https://tools.ietf.org/html/rfc7231>.
- [8] IETF RFC 5424: "The Syslog Protocol".  
NOTE: Available at <https://tools.ietf.org/html/rfc5424>.
- [9] ETSI GS NFV-SOL 002: "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Ve-Vnfm Reference Point".
- [10] ETSI GS NFV-SOL 003: "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Or-Vnfm Reference Point".
- [11] ETSI GS NFV-SOL 005: "Network Functions Virtualisation (NFV) Release 2; Protocols and Data Models; RESTful protocols specification for the Os-Ma-nfvo Reference Point".
- [12] ETSI GS NFV-SEC 012: "Network Functions Virtualisation (NFV) Release 3; Security; System architecture specification for execution of sensitive NFV components".