

# ISO/IEC 17203:2017-09 (E)

## Information technology - Open Virtualization Format (OVF) specification

---

### Contents

	Page
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	3
4 Symbols and abbreviated terms .....	5
5 OVF package .....	5
5.1 OVF package structure .....	5
5.2 Virtual disk formats .....	6
5.3 OVF package options .....	6
5.4 Distribution as a set of files .....	7
6 OVF descriptor .....	7
7 Envelope element.....	8
7.1 File references .....	8
7.2 Content element.....	9
7.3 Extensibility .....	10
7.4 Conformance .....	10
8 Virtual hardware description.....	11
8.1 VirtualHardwareSection .....	11
8.2 Extensibility .....	12
8.3 Virtual hardware elements .....	12
8.4 Ranges on elements .....	14
9 Core metadata sections .....	16
9.1 DiskSection .....	17
9.2 NetworkSection.....	18
9.3 ResourceAllocationSection.....	18
9.4 AnnotationSection.....	19
9.5 ProductSection.....	19
9.6 EulaSection .....	21
9.7 StartupSection .....	22
9.8 DeploymentOptionSection .....	23
9.9 OperatingSystemSection .....	24
9.10 InstallSection.....	24
9.11 EnvironmentFilesSection .....	24
9.12 BootDeviceSection.....	25
9.13 SharedDiskSection .....	25
9.14 ScaleOutSection .....	26
9.15 PlacementGroupSection and PlacementSection.....	27
9.16 EncryptionSection .....	28
10 Internationalization .....	29
10.1 Internal resource bundles .....	29
10.2 External resource bundles .....	29
10.3 Message content in external file .....	30
11 OVF environment and OVF environment file .....	30
11.1 Transport media.....	31
11.2 Transport media type .....	31
ANNEX A (informative) Symbols and conventions .....	33
ANNEX B (normative) OVF XSD .....	34
ANNEX C (informative) OVF mime type registration template .....	35
ANNEX D (informative) OVF examples .....	37
D.1 Examples of OVF package structure .....	37
D.2 Examples of distribution of files .....	37

D.3	Example of envelope element .....	38
D.4	Example of file references .....	38
D.5	Example of content element .....	39
D.6	Examples of extensibility.....	39
D.7	Examples of VirtualHardwareSection .....	40
D.8	Examples of virtual hardware elements.....	40
D.9	Example of ranges on elements .....	41
D.10	Example of DiskSection .....	42
D.11	Example of NetworkSection.....	42
D.12	Example of ResourceAllocationSection.....	42
D.13	Example of annotation .....	43
D.14	Example of Product section .....	43
D.15	Example of EULA section .....	43
D.16	Example of StartupSection .....	44
D.17	Example of DeploymentOptionSection.....	44
D.18	Example of OperatingSystemSection.....	45
D.19	Example of InstallSection .....	45
D.20	Example of EnvironmentFilesSection.....	45
D.21	Example of BootDeviceSection .....	45
D.22	Example of SharedDiskSection .....	46
D.23	Example of ScaleOutSection .....	46
D.24	Example of PlacementGroupSection.....	47
D.25	Example of EncryptionSection.....	48
D.26	Example of internationalization.....	49
D.27	Example of message content in an external file .....	50
D.28	Example of environment document .....	51
ANNEX E (informative)	Network port profile examples .....	52
E.1	Example 1 (OVF descriptor for one virtual system and one network with an inlined network port profile) .....	52
E.2	Example 2 (OVF descriptor for one virtual system and one network with a locally referenced network port profile).....	53
E.3	Example 3 (OVF descriptor for one virtual system and one network with a network port profile referenced by a URI) .....	55
E.4	Example 4 (OVF descriptor for two virtual systems and one network with two network port profiles referenced by URIs).....	57
E.5	Example 5 (networkportprofile1.xml) .....	59
E.6	Example 6 (networkportprofile2.xml) .....	60
ANNEX F (informative)	Deployment considerations .....	61
F.1	OVF package structure deployment considerations .....	61
F.2	Virtual hardware deployment considerations .....	61
F.3	Core metadata sections deployment considerations.....	61

## Tables

Table 1 – XML namespace prefixes .....	8
Table 2 – Actions for child elements with <code>ovf:required</code> attribute .....	12
Table 3 – HostResource element .....	13
Table 4 – Elements for virtual devices and controllers .....	14
Table 5 – Core metadata sections .....	16
Table 6 – Property types .....	21
Table 7 – Property qualifiers .....	21
Table 8 – Availability attributes .....	27
Table 9 – Affinity Attributes .....	28
Table 10 – Allowed combinations of scoped affinity and availability .....	28
Table 11 – Core sections for OEF .....	31