

ISO/IEC 5140:2024-01 (E)

Information technology - Cloud computing - Concepts for multi-cloud and the use of multiple cloud services

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Symbols and abbreviated terms	1
5	Notational conventions	2
6	Cloud computing using multiple CSPs	2
6.1	General	2
6.2	Interactions among parties	3
7	Multi-cloud	3
7.1	General	3
7.2	Multi-cloud sub-types	4
7.2.1	CSC-mediated multi-cloud	4
7.2.2	CSP-connected multi-cloud	4
7.3	Characteristics	5
7.4	Benefits	6
7.5	Considerations	8
7.6	Multi-cloud management	8
8	Federated cloud	9
8.1	General	9
8.2	Benefits	10
8.3	Considerations	11
8.4	Cloud service federation	11
8.4.1	Characteristics	11
8.4.2	CSF membership	12
8.4.3	Shared resource metadata and discovery	12
8.4.4	CSF governance	12
8.5	CSF domains	13
8.5.1	General	13
8.5.2	Administrative domains	13
8.5.3	Regulatory domains	13
8.6	CSF management sub-roles	14
8.6.1	General	14
8.6.2	CSF operator	14
8.6.3	CSF manager	14
8.6.4	CSF auditor	14
8.6.5	CSF broker	15
8.7	CSF topologies	15
9	Hybrid cloud	17
9.1	General	17
9.2	Characteristics	18
9.3	Benefits	19
9.4	Considerations	19
9.5	Hybrid cloud management	19
9.6	Hybrid multi-cloud	20

10	Inter-cloud	20
10.1	General.....	20
10.2	Characteristics.....	21
10.3	Benefits.....	21
10.4	Considerations.....	21
10.5	Management.....	22
	Annex A (informative) Use cases for multi-cloud management	23
	Bibliography	25