Isolation host with KES\KEA

Table of Contents

Documentation:

- [KSC Open API description](#)

Prerequisites

- internal user: api-user

Examples description:

- KSC address - 127.0.0.1 (the address can also be external)
- API Port - 13299 (default)
- User: api-user (intrental KSC user), base64: YXBpLXVzZXI=
- Password: password, base64: cGFzc3dvcmQ=
- Credentials:

	User	Password
	api-user	password
Base64:	YXBpLXVzZXI=	cGFzc3dvcmQ=

- Authentication, type: Authenticated session, other types: [KSC Open API description](#)
- Requests are in cUrl and http formats, as an alternative it is also possible to use Python library ([KlAkOAPI Python package](#))

1 Login

1.1 Start connection to KSC (Session::StartSession):

```
curl --location --request POST
'https://127.0.0.1:13299/api/v1.0/Session.StartSession' \
--header 'Authorization: KSCBasic user="YXBpLXVzZXI=",
pass="cGFzc3dvcmQ=", internal="1"'
```

Code Block 1 Session::StartSession

Username and password should be encoded to base64 format as part of a secure HTTPS session. For expamle https://www.base64encode.org/ can be used for encoding.

```
{
    "PxgRetVal": "nsPbUpP1oAVZlM1lODEbg8A=="
}
```

Code Block 2 Response

Use this token in request header

2 Find Host

Find host by filter string (HostGroup::FindHosts)

Filter string, contains a condition over host attributes, see also Search filter syntax.

We use "KLHST_WKS_DN" - Host display name

```
POST /api/v1.0/HostGroup.FindHosts HTTP/1.1
Host: localhost:13299
X-KSC-Session: nH4iKWCdxuBJWO5U4ATKSew==
Content-Type: application/json
Content-Length: 170

{
    "vecFieldsToReturn": [
        "KLHST_WKS_HOSTNAME",
        "KLHST_WKS_DN"
    ],
    "lMaxLifeTime": 1200,
    "wstrFilter": "(KLHST_WKS_DN=\"WIN10-*\")"
}
```

Code Block 3 HostGroup::FindHosts

Response ID

```
{"strAccessor":"ppYeO5rmkvKcMUm8vQzOK2","PxgRetVal":18}
```

Code Block 4 Response

Copy Accessor for next request (ChunkAccessor::GetItemsChunk):

```
curl -L -X POST
"https://127.0.0.1:13299/api/v1.0/ChunkAccessor.GetItemsChunk" -H "X-KSC-
Session: noOxgI9Ny7O5Whg/97qvcVg==" -H "Content-Type: application/json" --
data-raw "{
\"strAccessor\":\"fb07haDqXIKZbQzyDsMwx1\",
\"nStart\": 0,
\"nCount\": 100
}"
```

Code Block 5 ChunkAccessor::GetItemsChunk

Response info about host:

```
{
    "pChunk": {
        "KLCSP_ITERATOR_ARRAY": [
            {
                "type": "params",
                "value": {
                    "KLHST_WKS_DN": "WIN10-OPTIMUM-1",
                    "KLHST_WKS_HOSTNAME": "c0816918-fbc5-4fbc-8fed-
6f245756120e"
                }
            },
            {
                "type": "params",
                "value": {
                    "KLHST_WKS_DN": "WIN10-KES-11-OLD",
                    "KLHST_WKS_HOSTNAME": "ab365e11-a1c7-492b-a981-
e84402b33a8f"
                }
            }
        ]
    },
........
    "PxgRetVal": 18
}
```

Code Block 6 Response

Copy value "KLHST_WKS_HOSTNAME" for next request

3 KEA Isolation

3.1 HostGroup.GetHostInfo

Acquire specified host attributes. (HostGroup::GetHostInfo)

strHostName	(wstring) host name, a unique server-generated string (see KLHST_WKS_HOSTNAME attribute). It is NOT the same as computer network name (DNS-, FQDN-, NetBIOS-name)
pFields2Return	(array) array of names of host attributes to return. See List of host attributes for attribute names

```
POST /api/v1.0/HostGroup.GetHostInfo HTTP/1.1
Host: localhost:13299
X-KSC-Session: nH4iKWCdxuBJWO5U4ATKSew==
Content-Type: application/json
Content-Length: 185

{
    "strHostName":"ab365e11-a1c7-492b-a981-e84402b33a8f",
        "pFields2Return": [
        "KLHST_WKS_HOSTNAME",
        "KLHST_WKS_DN",
        "KLHST_APP_INFO"
        ]
}
```

Code Block 7 HostGroup.GetHostInfo

Response

```
{"PxgRetVal":{"KLHST_APP_INFO":{"type":"params","value":{"1103":{"type":"p
arams","value":{"1.0.0.0":{"type":"params","value":{"KLHST_APP_STATE":3,"K
LHST_APP_STATE_TIME":{"type":"datetime","value":"2022-02-
25T16:13:23Z"}}}}},"KES":{"type":"params","value":{"11.0.0.0":{"type":"par
ams","value":{"KLHST_APP_STATE":3,"KLHST_APP_STATE_TIME":{"type":"datetime
","value":"2022-03-
04T13:18:24Z"}}}}},"SOYUZ":{"type":"params","value":{"4.0.0.0":{"type":"pa
rams","value":{"KLHST_APP_STATE":3,"KLHST_APP_STATE_TIME":{"type":"datetim
e","value":"2022-03-04T14:18:25Z"}}}}}},"KLHST_WKS_DN":"WIN10-KES-11-
OLD","KLHST_WKS_HOSTNAME":"ab365e11-a1c7-492b-a981-e84402b33a8f"}}
```

Code Block 8 Response

3.2 HostGroup.SS_GetNames

Get section names from host settings storage. (HostGroup::SS_GetNames)

Parameters values should be taken from previously response

```
POST /api/v1.0/HostGroup.SS_GetNames HTTP/1.1
Host: localhost:13299
X-KSC-Session: nqH6Qma75t/wBcQm8vlyqvQ==
Content-Type: application/json
Content-Length: 148

{
    "strHostName":"ab365e11-a1c7-492b-a981-e84402b33a8f",
    "strType":"SS_SETTINGS",
    "strProduct":"SOYUZ",
    "strVersion":"4.0.0.0"
}
```

Code Block 9 HostGroup::SS_GetNames

Response:

```
{
    "PxgRetVal": [
        ".KLNAG_SECTION_REBOOT_REQUEST",
        "85",
        "AccountLogonSettings",
        "ApplicationSettings",
        "AutoStartEntriesNotifySettings",
        "ConnectionSettings",
        "CreateProcessSettings",
        "FileChangeNotificationSettsEdr",
        "KLEVP_NF_SECTION",
        "KsnServiceSettings",
        "LoadImageSettingsEdr",
        "MaintenanceSettings",
        "MdrServiceSettings",
        "MessageBrokerSettings",
        "NetworkConnectionSettingsEdr",
        "NetworkIsolationProfilesSetts",
        "NetworkIsolationSettings", #copy this field setting
        "PasswordSettings",
        "PreventionSettings",
        "ProductPermissionSettings",
        "QuarantineSettings",
        "SandboxSettings",
        "SelfDefenceSettings",
        "UserModeApiMonitorSrvSettings",
        "WMIActivitySettings",
        "WindowsEventLogSettingsEdr",
        "WindowsRegistrySettings"
    ]
}
```

Code Block 10 Response

With NWC web console KSC create local network exteption for VPN:

1) Open host properties → Applications → KEA
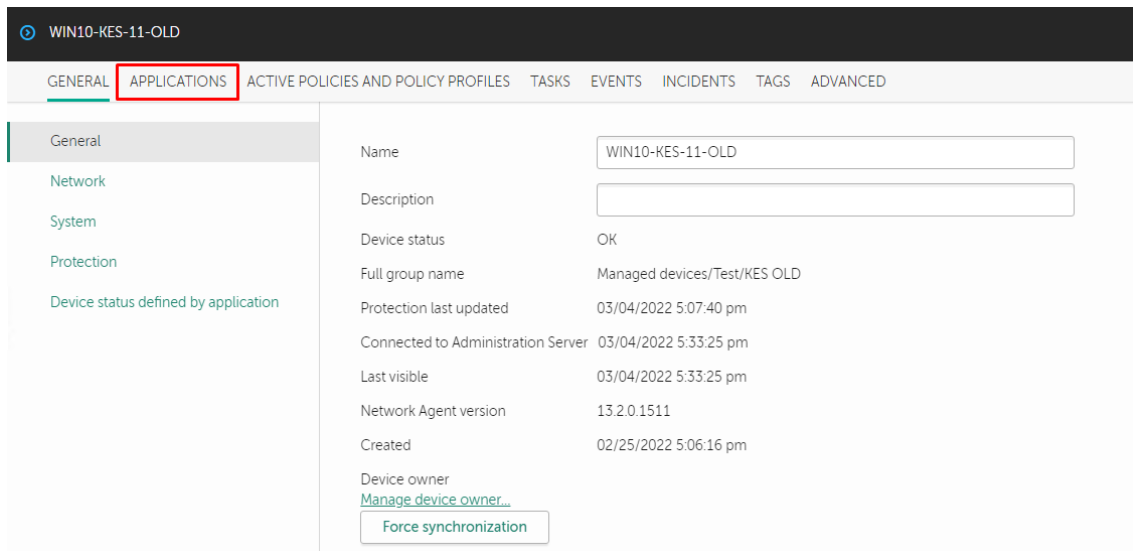
2) Open tab APP Settings → Network Isolation → Isolation on detection
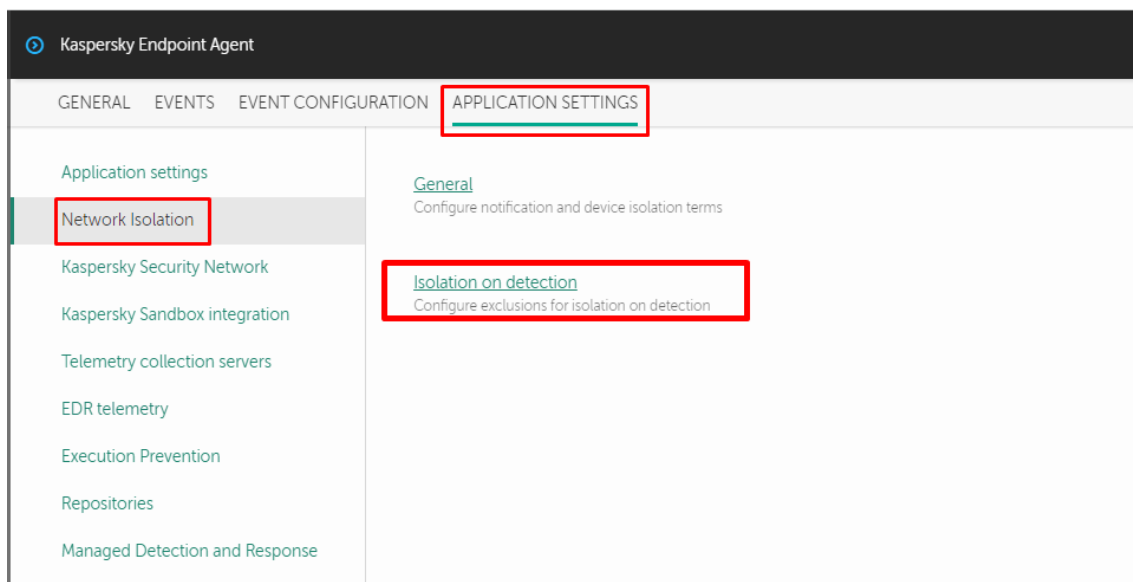
3) Add rule for RDP → click "OK" → click "Save"
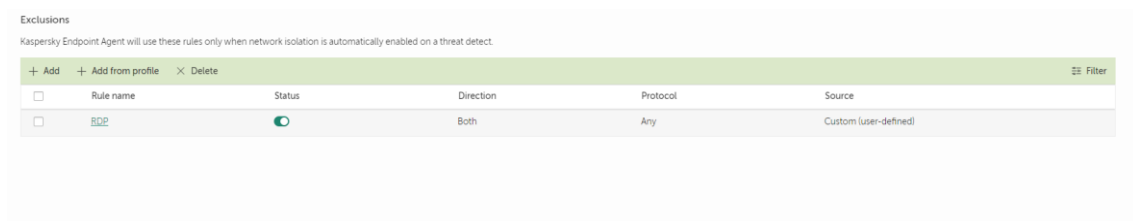
3.3 HostGroup.SS_Read

Read data from host settings storage. (HostGroup::SS_Read)

Parameters values should be taken from two previously responses

```
POST /api/v1.0/HostGroup.SS_Read HTTP/1.1
Host: localhost:13299
X-KSC-Session: nqc+0P0UI+Wzuu+FREB74yQ==
Content-Type: application/json
Content-Length: 194

{
    "strHostName":"ab365e11-a1c7-492b-a981-e84402b33a8f",
    "strType":"SS_SETTINGS",
    "strProduct":"SOYUZ",
    "strVersion":"4.0.0.0",
    "strSection":"NetworkIsolationSettings"
}
```

Code Block 11 HostGroup::SS_Read

Response info about Network Isolation with RDP rule exception:

```
    "strHostName":"ab365e11-a1c7-492b-a981-e84402b33a8f",
```

```json
{
    "PxgRetVal": {
        "BaseSettings": {
            "type": "params",
            "value": {
                "Revision": {
                    "type": "long",
                    "value": 0
                },
                "__VersionInfo": [
                    1,
                    0
                ]
            }
        },
        "Enable": false,
        "Exclusions": [
            {
                "type": "params",
                "value": {
                    "Description": "Custom (user-defined)",
                    "Name": "Custom (user-defined)",
                    "Rules": [
                        {
                            "type": "params",
                            "value": {
                                "AppProtocolName": "RDP",
                                "Applications": [],
                                "Direction": 3,
                                "Enable": true,
                                "LocalAddress": "",
                                "LocalPort": {
                                    "type": "params",
                                    "value": {
                                        "MaxPort": 3389,
                                        "MinPort": 3389,
                                        "__VersionInfo": [
                                            1,
                                            0
                                        ]
                                    }
                                },
                                "Protocol": 0,
                                "RemoteAddress": "",
                                "RemotePort": {
                                    "type": "params",
                                    "value": {
                                        "MaxPort": 0,
                                        "MinPort": 0,
                                        "__VersionInfo": [
                                            1,
                                            0
                                        ]
                                    }
                                },
                                "UseApplications": false,
                                "UseLocalAddress": false,
                                "UseLocalPort": true,
                                "UseProtocol": false,
                                "UseRemoteAddress": false,
                                "UseRemotePort": false,
                                "__VersionInfo": [
                                    1,
                                    1
                                ]
                            }
                        }
```

```
                                }
                            ],
                            "__VersionInfo": [
                                1,
                                0
                            ]
                        }
                    }
                ],
                "IsolationTimeout": 1800,
                "NotifyUser": true,
                "UseIsolationTimeout": true,
                "__VersionInfo": [
                    1,
                    2
                ]
            }
        }
    }
```

Code Block 12 Response

Copy all response for next request.

3.4 HostGroup.SS_Write

Write data to host settings storage for isolation workstation with RDP rule.
(HostGroup::SS_Write)

1) Use previous value parameters

2) for **nOption** use 7

- 7 - "Clear", replaces existing section contents with pData, i.e. existing section contents will deleted and variables from pData will be written to the section.

3) for **pSettings** past previous response and change

"Enable": true

```
POST /api/v1.0/HostGroup.SS_Write HTTP/1.1
Host: localhost:13299
X-KSC-Session: nbpsiiOAAxiDWfMSVkgciWQ==
Content-Type: application/json
Content-Length: 1066

{
    "strHostName":"bdcae680-eeaa-4279-a822-92a0d3e01dfb",
    "strType":"SS_SETTINGS",
    "strProduct":"SOYUZ",
    "strVersion":"4.0.0.0",
    "strSection":"NetworkIsolationSettings",
    "nOption":7,
    "pSettings":{
        "BaseSettings": {
            "type": "params",
            "value": {
                "Revision": {
                    "type": "long",
                    "value": 0
                },
                "__VersionInfo": [
                    1,
                    0
                ]
            }
        },
        "Enable": true, #Isolation ON
        "Exclusions": [
            {
                "type": "params",
                "value": {
                    "Description": "Custom (user-defined)",
                    "Name": "Custom (user-defined)",
                    "Rules": [
                        {
                            "type": "params",
                            "value": {
                                "AppProtocolName": "RDP", #custom rule for
RDP
                                "Applications": [],
                                "Direction": 3,
                                "Enable": true,
                                "LocalAddress": "",
                                "LocalPort": {
                                    "type": "params",
                                    "value": {
                                        "MaxPort": 3389,
                                        "MinPort": 3389,
                                        "__VersionInfo": [
                                            1,
                                            0
                                        ]
                                    }
                                },
                                "Protocol": 0,
                                "RemoteAddress": "",
                                "RemotePort": {
                                    "type": "params",
                                    "value": {
                                        "MaxPort": 0,
                                        "MinPort": 0,
                                        "__VersionInfo": [
                                            1,
                                            0
                                        ]
```

```
                              }
                          },
                          "UseApplications": false,
                          "UseLocalAddress": false,
                          "UseLocalPort": true,
                          "UseProtocol": false,
                          "UseRemoteAddress": false,
                          "UseRemotePort": false,
                          "__VersionInfo": [
                              1,
                              1
                          ]
                      }
                  }
              ],
              "__VersionInfo": [
                  1,
                  0
              ]
          }
      }
  ],
  "IsolationTimeout": 1800,
  "NotifyUser": true,
  "UseIsolationTimeout": true,
  "__VersionInfo": [
      1,
      2
  ]
  }
}
```

Code Block 13 HostGroup::SS_Write

Response

```
  {  }
```

Code Block 14 Response

Host isolated successful.

For off isolation you must cnahge for **pSettings** past previous response and change

"Enable": false

4 KES Isolation (11.7 and upper)

4.1 FindHost

Find Host with previous metod and copy value "KLHST_WKS_HOSTNAME"

For example:

"KLHST_WKS_DN":"KEDRO-1","KLHST_WKS_HOSTNAME":"a20da5de-49e5-469a-92ea-41b5adb74ea4"

4.2 SrvView

Find srvview data by filter string (SrvView::ResetIterator)

"wstrViewName" - check List of supported srvviews.

"vecFieldsToReturn" - check
https://support.kaspersky.com/help/KSC/13.1/KSCAPI/a00307.html

```
POST /api/v1.0/SrvView.ResetIterator HTTP/1.1
Host: localhost:13299
X-KSC-Session: nXo75DRoFMRjNp2jwByKlfg==
Content-Type: application/json
Content-Length: 614

{
    "wstrViewName": "HostTasksSrvView",
    "vecFieldsToReturn": [
        "nState",
        "strTask",
        "TASK_NAME",
        "txtDisplayName",
        "TASKID_PRODUCT_NAME",
        "TASKID_PRODUCT_VERSION",
        "bCannotBeDeleted",
        "bSystem"
    ],
    "vecFieldsToOrder": [
        {
            "type": "params",
            "value": {
                "Name": "TASK_NAME",
                "Asc": "true"
            }
        }
    ],
    "lifetimeSec": 100,
    "pParams": {
        "strHostId": "a20da5de-49e5-469a-92ea-41b5adb74ea4"
    },
    "wstrFilter": ""
}
```

Code Block 15 SrvView::ResetIterator

Response ID

```
{"wstrIteratorId":"67D74142AE0FA1A3D05CD696B957902B"}
```

Code Block 16 Response

GetRecordRange from Response data (SrvView.GetRecordRange):

```
curl -L -X POST "https://127.0.0.1:13299/api/v1.0/SrvView.GetRecordRange"
-H "X-KSC-Session: noOxgI9Ny7O5Whg/97qvcVg==" -H "Content-Type:
application/json" --data-raw "{
    \"wstrIteratorId\":\"67D74142AE0FA1A3D05CD696B957902B\",
    \"nStart\": 0,
    \"nEnd\": 100
    }"
```

Code Block 17 SrvView.GetRecordRange

Response info about tasks:

```
{"pRecords":{"KLCSP_ITERATOR_ARRAY":[........{"type":"params","value":{"TA
SKID_PRODUCT_NAME":"KES","TASKID_PRODUCT_VERSION":"11.0.0.0","TASK_NAME":"
xdr_networkisolation_start","bCannotBeDeleted":true,"bSystem":false,"nStat
e":32,"strTask":"_LOCAL_2212c5ce-c23d-4c55-8bca-
656221d5f056","txtDisplayName":"Network
isolation"}},{"type":"params","value":{"TASKID_PRODUCT_NAME":"KES","TASKID
_PRODUCT_VERSION":"11.0.0.0","TASK_NAME":"xdr_networkisolation_stop","bCan
notBeDeleted":true,"bSystem":false,"nState":32,"strTask":"_LOCAL_f0395954-
c011-445c-b2e3-0a1074a2cf8d","txtDisplayName":"Termination of network
isolation"}}]}}
```

Code Block 18 Response

Copy value "strTask" for Task "xdr_networkisolation_start" and "xdr_networkisolation_stop"

For example:

Isolation ON => "TASK_NAME":"xdr_networkisolation_start" .... "strTask":"_LOCAL_2212c5ce-c23d-4c55-8bca-656221d5f056"

Isolation OFF => "TASK_NAME":"xdr_networkisolation_stop .... "strTask":"_LOCAL_f0395954-c011-445c-b2e3-0a1074a2cf8d"

4.3 Isolation ON

4.4 GetHostTasks

Return server specific identity to acquire and manage host tasks. (HostGroup::GetHostTasks)

```
POST /api/v1.0/HostGroup.GetHostTasks HTTP/1.1
Host: localhost:13299
X-KSC-Session: nXo75DRoFMRjNp2jwByKlfg==
Content-Type: application/json
Content-Length: 58

{
"strHostName":"a20da5de-49e5-469a-92ea-41b5adb74ea4"
}
```

Code Block 19 HostGroup.GetHostTasks

Response:

```
{"PxgRetVal":"8122017D5C4081753E8FDE94244DC1AF"}
```

Code Block 20 Response

4.5 HostTasks

4.5.1 GetTaskData

Acquire task settings. (HostTasks::GetTaskData)

strSrvObjId - server object ID that got from HostGroup.GetHostTasks

strTask - storage identifier of the task (such as returned by HostTasks.AddTask)

```
POST /api/v1.0/HostTasks.GetTaskData HTTP/1.1
Host: localhost:13299
X-KSC-Session: nXo75DRoFMRjNp2jwByKlfg==
Content-Type: application/json
Content-Length: 112

{
"strTask":"_LOCAL_2212c5ce-c23d-4c55-8bca-656221d5f056",
"strSrvObjId":"8122017D5C4081753E8FDE94244DC1AF"
}
```

Code Block 21 HostTasks::GetTaskData

Response:

{"PxgRetVal":{"EVENT_TYPE":"PRTS_EVENT_NONE","FILTER_EVENTS_COMPONENT_NAME
":"","FILTER_EVENTS_INSTANCE_ID":"","FILTER_EVENTS_PRODUCT_NAME":"","FILTE
R_EVENTS_VERSION":"","TASKID_COMPONENT_NAME":"Connector","TASKID_INSTANCE_
ID":"","TASKID_PRODUCT_NAME":"KES","TASKID_VERSION":"11.0.0.0","TASKSCH_FI
RST_EXECUTION_TIME":{"type":"datetime","value":"1970-01-
01T00:00:00Z"},"TASKSCH_FIRST_EXECUTION_TIME_SEC":0,"TASKSCH_LIFETIME":{"t
ype":"datetime","value":""},"TASKSCH_MS_PERIOD":0,"TASKSCH_RUN_MISSED_FLAG
":false,"TASKSCH_TYPE":0,"TASK_ADDITIONAL_PARAMS":{"type":"params","value"
:{"CompatibilityInfo":{"type":"params","value":{"MinimalPluginVersion":"11
.7.0.0"}}},"PRTS_TASK_EXT_SHEDULE_FLAGS":0,"exclusionRules":[{"type":"param
s","value":{"applications":{"type":"params","value":{"enabled":false,"path
s":[]}},"dataSource":1,"localPorts":{"type":"params","value":{"enabled":tr
ue,"portRange":[{"type":"params","value":{"end":53,"start":53}}]}},"name":
"DNS","protocol":{"type":"params","value":{"enabled":true,"id":6}},"remote
Address":{"type":"params","value":{"enabled":false,"ip":{"type":"params","
value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remotePor
ts":{"type":"params","value":{"enabled":false,"portRange":[]}}}},{"type":"
params","value":{"applications":{"type":"params","value":{"enabled":false,
"paths":[]}},"dataSource":1,"localPorts":{"type":"params","value":{"enable
d":true,"portRange":[{"type":"params","value":{"end":53,"start":53}}]}},"n
ame":"DNS","protocol":{"type":"params","value":{"enabled":true,"id":17}},"
remoteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"par
ams","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"rem
otePorts":{"type":"params","value":{"enabled":false,"portRange":[]}}}},{"t
ype":"params","value":{"applications":{"type":"params","value":{"enabled":
true,"paths":["%systemroot%\\system32\\dns.exe"]}},"dataSource":1,"localPo
rts":{"type":"params","value":{"enabled":true,"portRange":[{"type":"params
","value":{"end":65535,"start":49152}}]}},"name":"Large numbered TCP
ports, randomly assigned by the RPC
service","protocol":{"type":"params","value":{"enabled":true,"id":6}},"rem
oteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params
","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remote
Ports":{"type":"params","value":{"enabled":false,"portRange":[]}}}},{"type
":"params","value":{"applications":{"type":"params","value":{"enabled":tru
e,"paths":["%systemroot%\\system32\\svchost.exe"]}},"dataSource":1,"localP
orts":{"type":"params","value":{"enabled":true,"portRange":[{"type":"param
s","value":{"end":135,"start":135}}]}},"name":"RPC Endpoint
Mapper","protocol":{"type":"params","value":{"enabled":true,"id":6}},"remo
teAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params"
,"value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remoteP
orts":{"type":"params","value":{"enabled":false,"portRange":[]}}}},{"type"
:"params","value":{"applications":{"type":"params","value":{"enabled":fals
e,"paths":[]}},"dataSource":0,"localPorts":{"type":"params","value":{"enab
led":false,"portRange":[]}},"name":"DNS
client","protocol":{"type":"params","value":{"enabled":true,"id":6}},"remo
teAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params"
,"value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remoteP
orts":{"type":"params","value":{"enabled":true,"portRange":[{"type":"param
s","value":{"end":53,"start":53}}]}}}}},{"type":"params","value":{"applicat
ions":{"type":"params","value":{"enabled":false,"paths":[]}},"dataSource":
0,"localPorts":{"type":"params","value":{"enabled":false,"portRange":[]}},
"name":"DNS
client","protocol":{"type":"params","value":{"enabled":true,"id":17}},"rem
oteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params
","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remote
Ports":{"type":"params","value":{"enabled":true,"portRange":[{"type":"para
ms","value":{"end":53,"start":53}}]}}}}},{"type":"params","value":{"applica
tions":{"type":"params","value":{"enabled":false,"paths":[]}},"dataSource"
:2,"localPorts":{"type":"params","value":{"enabled":true,"portRange":[{"ty
pe":"params","value":{"end":68,"start":68}}]}},"name":"DHCP
server","protocol":{"type":"params","value":{"enabled":true,"id":17}},"rem
oteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params
","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remote
Ports":{"type":"params","value":{"enabled":true,"portRange":[{"type":"para
ms","value":{"end":67,"start":67}}]}}}}},{"type":"params","value":{"applica
tions":{"type":"params","value":{"enabled":false,"paths":[]}},"dataSource"

```
:2,"localPorts":{"type":"params","value":{"enabled":true,"portRange":[{"ty
pe":"params","value":{"end":67,"start":67}}]}},"name":"DHCP
client","protocol":{"type":"params","value":{"enabled":true,"id":17}},"rem
oteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"params
","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remote
Ports":{"type":"params","value":{"enabled":true,"portRange":[{"type":"para
ms","value":{"end":68,"start":68}}]}}}},{"type":"params","value":{"applica
tions":{"type":"params","value":{"enabled":false,"paths":[]}},"dataSource"
:1,"localPorts":{"type":"params","value":{"enabled":true,"portRange":[{"ty
pe":"params","value":{"end":2535,"start":2535}}]}},"name":"MADCAP","protoc
ol":{"type":"params","value":{"enabled":true,"id":17}},"remoteAddress":{"t
ype":"params","value":{"enabled":false,"ip":{"type":"params","value":{"oct
ets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remotePorts":{"type":
"params","value":{"enabled":false,"portRange":[]}}}},{"type":"params","val
ue":{"applications":{"type":"params","value":{"enabled":false,"paths":[]}}
,"dataSource":1,"localPorts":{"type":"params","value":{"enabled":true,"por
tRange":[{"type":"params","value":{"end":647,"start":647}}]}},"name":"DHCP
failover","protocol":{"type":"params","value":{"enabled":true,"id":6}},"re
moteAddress":{"type":"params","value":{"enabled":false,"ip":{"type":"param
s","value":{"octets":{"type":"binary","value":""},"zoneIPv6":""}}}},"remot
ePorts":{"type":"params","value":{"enabled":false,"portRange":[]}}}}]},"iso
lationDuration":3600000,"klprts-TaskStorageId":"_LOCAL_2d076fbe-7e60-4a99-
9177-
173076a5a2b1","ksc_settings_compatibility::TaskUniqueId":"89621cce@xdr_net
workisolation_start@NetworkIsolationStart","responseId":{"type":"long","va
lue":7998665773575485050}}},"TASK_CLASS_ID":0,"TASK_DEL_AFTER_RUN_FLAG":fa
lse,"TASK_INFO_PARAMS":{"type":"params","value":{"DisplayName":"Network
isolation","klprts-TaskCannotBeDeleted":true,"klprts-
TaskScheduleSubtype":256}},"TASK_LAST_EXEC_TIME":{"type":"datetime","value
":"1970-01-
01T00:00:00Z"},"TASK_LAST_EXEC_TIME_SEC":0,"TASK_MAX_EXEC_TIME":0,"TASK_NA
ME":"xdr_networkisolation_start","TASK_PREP_START":0,"TASK_PRIORITY":1,"TA
SK_START_DELTA":0,"TASK_UNIQUE_ID":"_LOCAL_2212c5ce-c23d-4c55-8bca-
656221d5f056"}}
```

Code Block 22 Response

Copy some of value from response and change parametrs on next request with Network
isolation exclusions

RDP protocol (for example):

```
{
                        "type": "params",
                        "value": {
                            "applications": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "paths": []
                                }
                            },
                            "dataSource": 2, #inbound and outbound
                            "localPorts": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "portRange": [
                                            {
                                                "type": "params",
                                                "value": {
                                                    "end": 3389, #port
                                                    "start": 3389 #port
                                                }
                                            }
                                    ]
                                }
                            },
                            "name": "RDP ANY", #name
                            "protocol": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "id": 0 #TCP and UDP
                                }
                            },
                            "remoteAddress": {
                                "type": "params",
                                "value": {
                                    "enabled": false,
                                    "ip": {
                                        "type": "params",
                                        "value": {
                                            "octets": {
                                                "type": "binary",
                                                "value": ""
                                            },
                                            "zoneIPv6": ""
                                        }
                                    }
                                }
                            },
                            "remotePorts": {
                                "type": "params",
                                "value": {
                                    "enabled": false,
                                    "portRange": []
                                }
                            }
                        }
                    }
                }
```

Code Block 23 exclusionRules

4.5.2 UpdateTask

Modify task settings. (HostTasks::UpdateTask)

```
POST /api/v1.0/HostTasks.UpdateTask HTTP/1.1
Host: localhost:13299
X-KSC-Session: n18Zfc+1hPeedqD07uM96/A==
Content-Type: application/json
Content-Length: 32796

{
    "strTask": "_LOCAL_2212c5ce-c23d-4c55-8bca-656221d5f056",
    "strSrvObjId": "46A9BEBC82C3FB1121050247A0697ECC",
    "pData": {
        "TASKID_COMPONENT_NAME": "Connector",
        "TASKID_PRODUCT_NAME": "KES",
        "TASKID_VERSION": "11.0.0.0",
        "TASKSCH_TYPE": 5,
        "TASK_ADDITIONAL_PARAMS": {
            "type": "params",
            "value": {
                "CompatibilityInfo": {
                    "type": "params",
                    "value": {
                        "MinimalPluginVersion": "11.8.0.0"
                    }
                },
                "PRTS_TASK_EXT_SHEDULE_FLAGS": 0,
                "exclusionRules": [
                    {
                        "type": "params",
                        "value": {
                            "applications": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "paths": []
                                }
                            },
                            "dataSource": 2,
                            "localPorts": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "portRange": [
                                        {
                                            "type": "params",
                                            "value": {
                                                "end": 3389,
                                                "start": 3389
                                            }
                                        }
                                    ]
                                }
                            },
                            "name": "RDP ANY",
                            "protocol": {
                                "type": "params",
                                "value": {
                                    "enabled": true,
                                    "id": 0
                                }
                            },
                            "remoteAddress": {
                                "type": "params",
                                "value": {
                                    "enabled": false,
                                    "ip": {
                                        "type": "params",
                                        "value": {
```

```
                                            "octets": {
                                                "type": "binary",
                                                "value": ""
                                            },
                                            "zoneIPv6": ""
                                        }
                                    }
                                }
                            },
                            "remotePorts": {
                                "type": "params",
                                "value": {
                                    "enabled": false,
                                    "portRange": []
                                }
                            }
                        }
                    }
                }
            ],
            "isolationDuration":28800000,
            "klprts-TaskStorageId":"_LOCAL_2212c5ce-c23d-4c55-8bca-
    656221d5f056",

    "ksc_settings_compatibility::TaskUniqueId":"89621cce@xdr_networkisolation_
    start@NetworkIsolationStart",
            "responseId":{"type":"long","value":4294967295}}},
            "TASK_CLASS_ID":0,
            "TASK_DEL_AFTER_RUN_FLAG":false,
            "TASK_INFO_PARAMS":
            {"type":"params","value":{
                "DisplayName":"Network isolation",
                "klprts-TaskCannotBeDeleted":true,
                "klprts-TaskScheduleSubtype":512}
            },
            "TASK_NAME":"xdr_networkisolation_start",
            "TASK_PREP_START":0,
            "TASK_PRIORITY":1,
            "TASK_START_DELTA":0,
            "TASK_UNIQUE_ID":"_LOCAL_2212c5ce-c23d-4c55-8bca-
    656221d5f056"
        }
    }
```

Code Block 24 HostTasks::UpdateTask

Response

```
    { }
```

Code Block 25 Response

Host isolated successful with allowed RDP session.

4.6 Isolation OFF

For example:

Isolation OFF => "TASK_NAME":"xdr_networkisolation_stop .... "strTask":"_LOCAL_f0395954-
c011-445c-b2e3-0a1074a2cf8d"

4.7 GetHostTasks

Return server specific identity to acquire and manage host tasks. (HostGroup::GetHostTasks)

```
POST /api/v1.0/HostGroup.GetHostTasks HTTP/1.1
Host: localhost:13299
X-KSC-Session: nXo75DRoFMRjNp2jwByKlfg==
Content-Type: application/json
Content-Length: 58

{
"strHostName":"a20da5de-49e5-469a-92ea-41b5adb74ea4"
}
```

Code Block 26 HostGroup.GetHostTasks

Response:

```
{"PxgRetVal":"8122017D5C4081753E8FDE94244DC1AF"}
```

Code Block 27 Response

4.8 HostTasks

4.8.1 GetTaskData

Acquire task settings. (HostTasks::GetTaskData)

strSrvObjId - server object ID that got from HostGroup.GetHostTasks

strTask - storage identifier of the task (such as returned by HostTasks.AddTask)

```
POST /api/v1.0/HostTasks.GetTaskData HTTP/1.1
Host: localhost:13299
X-KSC-Session: nXo75DRoFMRjNp2jwByKlfg==
Content-Type: application/json
Content-Length: 112

{
"strTask":"_LOCAL_f0395954-c011-445c-b2e3-0a1074a2cf8d",
"strSrvObjId":"8122017D5C4081753E8FDE94244DC1AF"
}
```

Code Block 28 HostTasks::GetTaskData

Response:

```
{"PxgRetVal":{"EVENT_TYPE":"PRTS_EVENT_NONE","FILTER_EVENTS_COMPONENT_NAME
":"","FILTER_EVENTS_INSTANCE_ID":"","FILTER_EVENTS_PRODUCT_NAME":"","FILTE
R_EVENTS_VERSION":"","TASKID_COMPONENT_NAME":"Connector","TASKID_INSTANCE_
ID":"","TASKID_PRODUCT_NAME":"KES","TASKID_VERSION":"11.0.0.0","TASKSCH_FI
RST_EXECUTION_TIME":{"type":"datetime","value":"1970-01-
01T00:00:00Z"},"TASKSCH_FIRST_EXECUTION_TIME_SEC":0,"TASKSCH_LIFETIME":{"t
ype":"datetime","value":""},"TASKSCH_MS_PERIOD":0,"TASKSCH_RUN_MISSED_FLAG
":false,"TASKSCH_TYPE":0,"TASK_ADDITIONAL_PARAMS":{"type":"params","value"
:{"CompatibilityInfo":{"type":"params","value":{"MinimalPluginVersion":"11
.8.0.0"}},"PRTS_TASK_EXT_SHEDULE_FLAGS":0,"klprts-
TaskStorageId":"_LOCAL_f0395954-c011-445c-b2e3-
0a1074a2cf8d","ksc_settings_compatibility::TaskUniqueId":"59e0cc70@xdr_net
workisolation_stop@NetworkIsolationStop","responseId":{"type":"long","valu
e":4294967295}}},"TASK_CLASS_ID":0,"TASK_DEL_AFTER_RUN_FLAG":false,"TASK_I
NFO_PARAMS":{"type":"params","value":{"DisplayName":"Termination of
network isolation","klprts-TaskCannotBeDeleted":true,"klprts-
TaskScheduleSubtype":256}},"TASK_LAST_EXEC_TIME":{"type":"datetime","value
":"1970-01-
01T00:00:00Z"},"TASK_LAST_EXEC_TIME_SEC":0,"TASK_MAX_EXEC_TIME":0,"TASK_NA
ME":"xdr_networkisolation_stop","TASK_PREP_START":0,"TASK_PRIORITY":1,"TAS
K_START_DELTA":0,"TASK_UNIQUE_ID":"_LOCAL_f0395954-c011-445c-b2e3-
0a1074a2cf8d"}}
```

Code Block 29 Response

Copy some of value from response and change parametrs on next request with Network isolation exclusions

4.8.2 UpdateTask

Modify task settings. (HostTasks::UpdateTask)

```
POST /api/v1.0/HostTasks.UpdateTask HTTP/1.1
Host: localhost:13299
X-KSC-Session: n18Zfc+1hPeedqD07uM96/A==
Content-Type: application/json
Content-Length: 32796

{
    "strTask": "_LOCAL_f0395954-c011-445c-b2e3-0a1074a2cf8d",
    "strSrvObjId": "A06A16B837CC0E73BD3BCCDAA98A3129",
    "pData": {
        "TASKID_COMPONENT_NAME": "Connector",
        "TASKID_PRODUCT_NAME": "KES",
        "TASKID_VERSION": "11.0.0.0",
        "TASKSCH_MS_PERIOD": 0,
        "TASKSCH_TYPE": 5, #change
        "TASK_ADDITIONAL_PARAMS": {
            "type": "params",
            "value": {
                "CompatibilityInfo": {
                    "type": "params",
                    "value": {
                        "MinimalPluginVersion": "11.8.0.0"
                    }
                },
                "PRTS_TASK_EXT_SHEDULE_FLAGS": 0,
                "klprts-TaskStorageId": "_LOCAL_f0395954-c011-445c-b2e3-
0a1074a2cf8d",
                "ksc_settings_compatibility::TaskUniqueId":
"59e0cc70@xdr_networkisolation_stop@NetworkIsolationStop",
                "responseId": {
                    "type": "long",
                    "value": 4294967295
                }
            }
        },
        "TASK_CLASS_ID": 0,
        "TASK_DEL_AFTER_RUN_FLAG": false,
        "TASK_INFO_PARAMS": {
            "type": "params",
            "value": {
                "DisplayName": "Termination of network isolation",
                "klprts-TaskCannotBeDeleted": true,
                "klprts-TaskScheduleSubtype": 512 #change
            }
        },
        "TASK_NAME": "xdr_networkisolation_stop",
        "TASK_PREP_START": 0,
        "TASK_PRIORITY": 1,
        "TASK_START_DELTA": 0,
        "TASK_UNIQUE_ID": "_LOCAL_f0395954-c011-445c-b2e3-0a1074a2cf8d"
    }

}
```

Code Block 30 HostTasks::UpdateTask

Response

```
{ }
```

Code Block 31 Response

Host unblocked successfull.

5 End Session to KSC (Session::EndSession):

```
curl --location --request POST
'https://127.0.0.1:13299/api/v1.0/Session.EndSession' --header 'X-KSC-
Session: nsPbUpP1oAVZlM1lODEbg8A==' #PxgRetVal from Session.StartSession
```

Code Block 32 Session::EndSession