Accessing the NetRS/NetR8/NetR9 programmatic interface with linux curl command

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For receivers that have slow connections or for writing scripts to monitor receivers state of heath and other features
the use of the linux curl command can be used to accesses the receiver's built-in programmatic interfaces commands.

The basic command structure is:

curl -u LOGIN:PASSWORD "http://IPADDRESS/prog/show?COMMANDNAME"

Where:
- LOGIN and PASSWORD are the accoints on the receiver
- IPADDRESS is the IP address or domainname of the receiver
- COMMANDNAME is the command you are using

For example to view the tracking status you would use::

curl -u LOGIN:PASSWORD "http://IPADDRESS/prog/show?trackingStatus"

The response is:
<Show TrackingStatus>
Prn=29 Sys=GPS Elv=42 Azm=218 IODE=59 URA=2 L1snr=48 L2snr=36 L2Csnr=45
Prn=22 Sys=GPS Elv=3 Azm=276 IODE=103 URA=2.8 L1snr=38 L2snr=20
Prn=18 Sys=GPS Elv=36 Azm=300 IODE=7 URA=2 L1snr=47 L2snr=31
Prn=2 Sys=GPS Elv=2 Azm=132 IODE=41 URA=2
Prn=5 Sys=GPS Elv=16 Azm=071 IODE=68 URA=2 L1snr=41 L2snr=23 L2Csnr=40
Prn=6 Sys=GPS Elv=0 Azm=322
Prn=15 Sys=GPS Elv=73 Azm=021 IODE=21 URA=2 L1snr=50 L2snr=41 L2Csnr=50
Prn=21 Sys=GPS Elv=46 Azm=323 IODE=75 URA=2 L1snr=47 L2snr=32
Prn=9 Sys=GPS Elv=33 Azm=149 IODE=42 URA=2 L1snr=45 L2snr=31
Prn=27 Sys=GPS Elv=41 Azm=115 IODE=19 URA=2 L1snr=47 L2snr=32
<end of Show TrackingStatus>

To list the available commands:
url -u LOGIN:PASSWORD "http://IPADDRESS/prog/show?commands"

The response is:
<Show Commands>
Command verb=Show object=TrackingStatus
Command verb=Show object=ElevationMask
Command verb=Show object=SerialNumber

Command verb=Show object=Position
Command verb=Show object=UtcTime
Command verb=Show object=GpsTime
Command verb=Show object=Voltages
Command verb=Show object=Temperature
Command verb=Show object=GpsHealth
Command verb=Show object=GpsSatControls
Command verb=Show object=Ephemeris
Command verb=Show object=Almanac
Command verb=Show object=GpsUtcData
Command verb=Show object=GpsIonoData
Command verb=Show object=Tracking
Command verb=Show object=SbasSatControls
Command verb=Show object=WaasSatControls
Command verb=Show object=QzssSatControls
Command verb=Show object=PdopMask
Command verb=Show object=ClockSteering
Command verb=Show object=PPS
Command verb=Show object=AntennaTypes
Command verb=Show object=Antenna
Command verb=Show object=MultipathReject
Command verb=Show object=Sessions
Command verb=Show object=Commands
Command verb=Show object=FirmwareVersion
Command verb=Show object=RefStation
Command verb=Show object=IoPorts
Command verb=Show object=IoPort
Command verb=Show object=InstallFirmwareStatus
Command verb=Show object=NtripClient
Command verb=Show object=FirmwareWarranty
Command verb=Show object=GlonassSatControls
Command verb=Show object=TestMode
Command verb=Set object=ElevationMask
Command verb=Set object=PdopMask
Command verb=Set object=ClockSteering
Command verb=Set object=GpsSatControls
Command verb=Set object=SbasSatControls
Command verb=Set object=WaasSatControls
Command verb=Set object=QzssSatControls
Command verb=Set object=PPS
Command verb=Set object=Tracking
Command verb=Set object=Antenna
Command verb=Set object=MultipathReject
Command verb=Set object=RefStation
Command verb=Set object=IoPort
Command verb=Set object=Options

Command verb=Set object=GlonassSatControls
Command verb=Set object=TestMode
Command verb=Reset object=System
Command verb=Reset object=GnssData
Command verb=Delete object=IoPort
Command verb=Delete object=File
Command verb=Upload object=FirmwareFile
Command verb=Show object=File
Command verb=Download object=File
Command verb=Show object=Directory
<end of Show Commands>

Online URL:
https://kb.unavco.org/article/accessing-the-netrs-netr8-netr9-programmatic-interface-with-linux-curl-command-746.html