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- , YAML-

```
plugins:
  base:
    jmx5-qinq:
    ...
    actions:
      authorize:
    ...
      reply:
        - condition: $context.has_tag?("cpe_is_up_to_date") and $context.has_tag?
("network_access_allowed")
          template:
            RAD_REPLY:
              'ERX-Service-Activate:1': '$customer_profile.attributes.try("Internet-Service-Code",
"" ) + "(" + $customer_profile.attributes.try("Speed-Limit-bps", "0") + ")"'
              'ERX-Service-Statistics:1': '"time-volume"'
              Framed-IP-Address: $customer_profile.attributes.try("CPE-IP")
              Framed-IP-Netmask: $customer_profile.attributes.try("CPE-IP-Mask")
              Service-Type: '"Framed-User"'
              Session-Timeout: '"900"'
    ...
```

\$rlm	<div><div>rlm_perl FreeRADIUS. , :.</div><div><div>\$rlm</div><div><div>{</div><div>"REJECT": 0,</div><div>"FAIL": 1,</div><div>"OK": 2,</div><div>"HANDLED": 3,</div><div>"INVALID": 4,</div><div>"USERLOCK": 5,</div><div>"NOTFOUND": 6,</div><div>"NOOP": 7,</div><div>"UPDATED": 8,</div><div>"NUMCODES": 9</div><div>}</div></div></div></div>	<ul style="list-style-type: none"><li>• \$rlm.NOTFOUND</li><li>• \$rlm.OK</li></ul>

<code>\$var</code>	<pre>, . : .  .</pre> <div><b>\$var</b></div> <pre>{   "Remote-Circuit-Ids": {     "Remote_Id": "10.70.12.117",     "Circuit_Id": 12   },   "Actual-MAC-Address": "93-AA-4A-B1-D6-79",   "Customer-VLAN": "114" }</pre>	<ul style="list-style-type: none"><li>• <code>\$var.Remote-Circuit-Ids.Remote_Id</code></li><li>• <code>\$var.Customer-VLAN</code></li></ul>
<code>\$request</code>	<pre>RADIUS-, rlm_perl.  :  • req_type — : authorize, authenticate, accounting, p   ost_auth; • generated_at — ; • RAD_REQUEST — RADIUS; • RAD_CHECK — ; • RAD_REPLY — RADIUS-.</pre> <div><b>\$request</b></div> <pre>{   "req_type": "authorize",   "RAD_REQUEST": {     "NAS-Port-Type": "Virtual",     "CHAP-Password": "0x01375c12a4c1bf31a195bfb74ca2ab9329",     "Service-Type": "Framed-User",     "Tunnel-Type": "L2TP",     "Tunnel-Client-Endpoint": "192.168.2.1",     "CHAP-Challenge": "0x5502e459b4e20784bf0003b25021488a",     "NAS-IP-Address": "192.168.10.110",     "NAS-Port-Id": "L2TP LNS 33",     "Framed-Protocol": "PPP",     "User-Name": "admin-test",     "NAS-Identifier": "bras2",     "NAS-Port": "2432696353"   },   "RAD_CHECK": {     "Auth-Type": "CHAP"   } }</pre>	<ul style="list-style-type: none"><li>• <code>\$request.RAD_CHECK.Auth-Type</code></li><li>• <code>\$request.RAD_REQUEST.User-Name</code></li><li>• <code>\$request.generated_at.to_s("%d.%m.%Y %H:%M:%S")</code></li></ul>

\$response	<div><div>RADIUS-, rlm_perl RADIUS.</div><div>, :</div><div><ul style="list-style-type: none"><li>• result — \$rlm();</li><li>• RAD_CHECK — ;</li><li>• RAD_REPLY — RADIUS.</li></ul></div></div> <div><div>\$response</div><div><pre>{   "RAD_CHECK": {     "Cleartext-Password": "password",     "Auth-Type": "CHAP"   },   "result": 2 }</pre></div></div>	<ul style="list-style-type: none"><li>• \$response.try( "RAD_REPLY" ).try( "DHCP-Classless-Static-Route" )</li><li>• \$response.Cleartext-Password</li><li>• \$response.try( "RAD_REPLY" ).present?()</li></ul>
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<div>\$customer_profile</div>	<div><div><div></div><div></div></div><div><div></div><div></div></div></div> <div><div><div>\$customer_profile</div><div><div>{   "nested_profiles": [],   "dynamic_attributes": [],   "equipment_id": "50983201",   "_id": ObjectId('5631d972336b5557b82ea627'),   "active": True,   "attributes": {     "Simultaneous-Use": "1",     "Username": "admin-test",     "Static-IP": None,     "Service-State-Code": "SERV_STATE_InsufficientFunds",     "Password": "password",     "Speed-Upload-bps": "6291456",     "Speed-Download-bps": "6291456"   },   "child_profiles": [],   "context": "C70158719E376FC509318E242C521F5B873A8B437",   "firm_id": "100",   "signature": "       0051596501 0051596501",   "profile_id": "1615601",   "template_id": "20101",   "profile_type": "C" }</div></div></div></div>
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\$customer\_profile

{  
 "nested\_profiles": None,  
 "dynamic\_attributes": None,  
 "equipment\_id": None,  
 "\_id": None,  
 "active": None,  
 "attributes": {},  
 "child\_profiles": [],  
 "context": None,  
 "firm\_id": None,  
 "signature": None,  
 "profile\_id": None,  
 "template\_id": None,  
 "profile\_type": None  
}

## \$provider\_profile

```
{
  "dynamic_attributes": [],
  "template_id": "42801",
  "profile_id": "459859701",
  "nested_profiles": [
    {
      "dynamic_attributes": [],
      "template_id": "40501",
      "profile_id": "920732301",
      "bind_type": "network_connection",
      "signature":
"|||||||1130457991|1130457991",
      "attributes": {
        "IP-Address": "10.242.119.11",
        "L2TP-Password": "qwerty",
        "Simultaneous-Use": "1",
        "Subnet-Mask": "255.255.255.0",
        "Gateway-IP": "10.242.119.1",
        "L2TP-Login": "test-login"
      },
      "active": True,
      "firm_id": "100",
      "equipment_id": "1130577491",
      "profile_type": "C",
      "child_profiles": [],
      "bind_id": "15805201",
      "context":
"C82B0D4273F886E1720C3812AC82AE961285AC2AD"
    },
    {
      "context":
"P3129D3A086862F2BEEA34929D1C3670C31224948",
      "attributes": {
        "Switch-IP": "10.70.12.117",
        "Switch-Port-Code": "12"
      },
      "active": True,
      "_id": ObjectId('55f9662d72099a106d77893f'),
      "firm_id": "100",
      "equipment_id": "392626801",
      "profile_type": "P",
      "child_profiles": [],
      "signature": "|||"
    }
  ]
}
```

	<div> <div><b>\$provider_profile</b></div> <div> <pre>{   "nested_profiles": None,   "dynamic_attributes": None,   "equipment_id": None,   "_id": None,   "active": None,   "attributes": {},   "child_profiles": [],   "context": None,   "firm_id": None,   "signature": None,   "profile_id": None,   "template_id": None,   "profile_type": None }</pre> </div> </div>	
\$bind_id	(\$customer_profile) (\$provider_profile). .	

<p>\$context</p>	<p>, , , , .</p> <div><div>\$context</div><pre>{   "var": [     {       "Remote-Circuit-Ids": {         "Remote_Id": "10.70.12.117",         "Circuit_Id": 12       },     },     {       "Actual-MAC-Address": "93-AA-4A-B1-D6-79"     },     {       "Customer-VLAN": "114"     }   ],   "request": {     "RAD_REQUEST": {       "NAS-Port-Type": "Virtual",       "CHAP-Password": "0x01375c12a4c1bf31a195bfb74ca2ab9329",       "Service-Type": "Framed-User",       "Tunnel-Type": "L2TP",       "Tunnel-Client-Endpoint": "192.168.2.1",       "CHAP-Challenge": "0x5502e459b4e20784bf0003b25021488a",       "NAS-IP-Address": "192.168.10.110",       "NAS-Port-Id": "L2TP LNS 33",       "Framed-Protocol": "PPP",       "User-Name": "admin-test",       "NAS-Identifier": "bras2",       "NAS-Port": "2432696353"     },     "req_type": "authorize",     "RAD_CHECK": {       "Auth-Type": "CHAP"     }   },   "tags": {     "authorize",     "request_from_smartedge"   },   "response": {} }</pre></div>	<ul style="list-style-type: none"><li>• \$context.has_tag?("new-session")</li><li>• \$context.has_tag?("simultaneous-limit-exceeded")</li></ul>
<p>\$session</p>	<p>, .</p>	<ul style="list-style-type: none"><li>• \$session.attributes.try("Speedup-Service-State-Code")</li></ul>

## \$session

```
{
  "bind_id": None,
  "load_to_hydra": True,
  "services": [
    {
      "service_id": 50546901,
      "value": 0,
      "unit": "bytes"
    },
    {
      "service_id": 50547101,
      "value": 0,
      "unit": "bytes"
    }
  ],
  "services_loaded": False,
  "last_load_at": None,
  "start_at": datetime.datetime(2015, 11, 4,
8, 28, 20, 801000),
  "last_event_timestamp": datetime.datetime
(2015, 11, 4, 8, 28, 21),
  "provider_profile_id": None,
  "_id": ObjectId('56399774336b5557aa2ea629'),
  "duration_sec": 0,
  "plugin_instance_name": "l2tp-login",
  "customer_equipment_id": "50983201",
  "session_id": "FF10FFFF58000021-56399774",
  "customer_template_id": "20101",
  "state": "Started",
  "session_unique_id":
"9c2f51c907674a2f0d63bf4717a5f6d7",
  "customer_context":
"C70158719E376FC509318E242C521F5B873A8B437",
  "termination_cause": None,
  "plugin_name": "base",
  "finish_at": None,
  "provider_equipment_id": None,
  "customer_child_profiles": [],
  "provider_context": None,
  "archived_at": None,
  "active": True,
  "attributes": {
    "Speedup-Service-State-Code": None,
    "Acct-Interim-Interval": "600",
    "User-Name": "admin-test",
    "NAS-Port": "2432696353",
    "NAS-Identifier": "bras2",
    "NAS-Port-Id": "L2TP LNS 33",
    "Qos-Policing-Profile-Name": "5120-in",
    "Filter-Id": [
      "in:acl_default_subscriber_in",
      "out:acl_default_subscriber_out"
    ],
    "Framed-IP-Address": "10.242.119.11",
    "NAS-IP-Address": "192.168.10.110",
    "Qos-Metering-Profile-Name": "5120-out"
  },
  "provider_signature": None,
  "customer_signature":
"|||||||0051596501|0051596501",
  "session_loaded": False,
  "service_profile_id": "1615601",
  "firm_id": "100",
  "customer_profile_id": "1615601",
  "provider_template_id": None
}
```



, — , .

**\$session**

```
{
  "bind_id": None,
  "load_to_hydra": None,
  "services": [],
  "services_loaded": False,
  "last_load_at": None,
  "start_at": None,
  "last_event_timestamp": None,
  "provider_profile_id": None,
  "_id": None,
  "duration_sec": 0,
  "plugin_instance_name": None,
  "customer_equipment_id": None,
  "session_id": None,
  "customer_template_id": None,
  "state": None,
  "session_unique_id": None,
  "customer_context": None,
  "termination_cause": None,
  "plugin_name": None,
  "session_duplicate_protection": None,
  "finish_at": None,
  "provider_equipment_id": None,
  "customer_child_profiles": None,
  "provider_context": None,
  "archived_at": None,
  "active": True,
  "attributes": None,
  "provider_signature": None,
  "customer_signature": None,
  "session_loaded": False,
  "service_profile_id": None,
  "firm_id": None,
  "customer_profile_id": None,
  "provider_template_id": None
}
```

or, and, not	: , , .
<=, <, >=, >	: , , , .
==, !=	: , .
+, -, *, /, %	: , , , , .

, . , .

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<code>&lt;value&gt;.empty?()</code>	<code>&lt;value&gt; «»? :</code> <ul style="list-style-type: none"> <li>• None;</li> <li>• ;</li> <li>• 0.</li> </ul>	<ul style="list-style-type: none"> <li>• <code>\$customer_profile.attributes.Static-IP.empty?()</code></li> <li>• <code>\$request.RAD_REQUEST.try("DHCP-Relay-Circuit-Id").empty?()</code></li> </ul>
<code>&lt;string&gt;.ends_with?(&lt;suffix&gt;[, &lt;start_position&gt;[, &lt;end_position&gt;]])</code>	<code>&lt;string&gt; &lt;suffix&gt;? , , C &lt;start_position&gt; &lt;end_position&gt;. , .</code>	<code>\$response.RAD_REPLY.DHCP-Subnet-Mask.ends_with?("/32")</code>
<code>&lt;dictionary&gt;.has_field?(&lt;field_name&gt;)</code>	<code>&lt;field_name&gt; &lt;dictionary&gt;?</code>	<code>\$response.RAD_REPLY.has_field?("DHCP-Flags")</code>
<code>\$context.has_tag?(&lt;tag_name&gt;)</code>	<code>? \$context.</code>	<ul style="list-style-type: none"> <li>• <code>\$context.has_tag?("accounting")</code></li> <li>• <code>\$context.has_tag?("auth-isg-service")</code></li> </ul>
<code>&lt;substring&gt;.in?(&lt;string&gt;)</code> <code>&lt;value&gt;.in?(&lt;list_of_values&gt;)</code>	<code>&lt;substring&gt; &lt;string&gt;?</code> <code>&lt;value&gt; &lt;list_of_values&gt;?</code>	<ul style="list-style-type: none"> <li>• <code>\$var.Separator.in?(\$request.RAD_REQUEST.UserName)</code></li> <li>• <code>\$request.RAD_REQUEST.try("Session-Error-Msg").in?("Radius test by administrator; Authentication failure".split(";"))</code></li> <li>• <code>"local_access".in?(\$customer_profile.attributes.Service-Tags.split(", "))</code></li> </ul>
<code>&lt;string&gt;.ip4?()</code>	<code>&lt;string&gt; IPv4-?</code>	<code>\$request.RAD_REQUEST.Agent-Remote-Id.ip4?()</code>
<code>&lt;string&gt;.ip4_mask?()</code>	<code>&lt;string&gt; IPv4-?</code>	<code>\$request.RAD_REQUEST.DHCP-Subnet-Mask.ip4_mask?()</code>
<code>&lt;string&gt;.like?(&lt;pattern&gt;)</code>	<code>&lt;string&gt; &lt;pattern&gt;? <a href="#">re Python</a>.</code>	<code>\$request.RAD_REQUEST.Agent-Circuit-Id.like?("^0x(.+)\$")</code>
<code>&lt;string&gt;.mac?()</code>	<code>&lt;string&gt; MAC-?</code>	<code>\$request.RAD_REQUEST.Agent-Remote-Id.mac?()</code>
<code>&lt;dictionary&gt;.null?()</code>	<code>&lt;dictionary&gt;?</code>	<code>\$customer_profile.null?()</code>
<code>&lt;value&gt;.present?()</code>	<code>?</code>	<ul style="list-style-type: none"> <li>• <code>\$bind_id.present?()</code></li> <li>• <code>\$customer_profile.present?()</code></li> </ul>
<code>&lt;string&gt;.private_ip4?()</code>	<code>IPv4- &lt;string&gt; :</code> <ul style="list-style-type: none"> <li>• 10.0.0.0/8;</li> <li>• 172.16.0.0/12;</li> <li>• 192.168.0.0/16?</li> </ul>	<code>\$request.RAD_REQUEST.Agent-Remote-Id.private_ip4?()</code>
<code>&lt;string&gt;.starts_with?(&lt;prefix&gt;[, &lt;start_position&gt;[, &lt;end_position&gt;]])</code>	<code>&lt;string&gt; &lt;prefix&gt;? , C &lt;start_position&gt; &lt;end_position&gt;. , .</code>	<code>\$request.RAD_REQUEST.UserName.starts_with?("Tester", 4, 16)</code>

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<code>&lt;value&gt;.coalesce(&lt;arg1&gt;[, &lt;arg2&gt;[, &lt;arg3&gt;...]])</code>	<code>None &lt;arg1&gt;, &lt;arg2&gt; .., &lt;value&gt; None.</code> <code>, .</code>	<code>\$customer_profile.attributes.L2TP-Class.coalesce("3")</code> <ul style="list-style-type: none"><li>None "3"</li><li>"15" "15"</li></ul> <code>\$customer_profile.attributes.Custom-ACL-Name.coalesce(\$customer_profile.attributes.Service-ACL-Name, \$var.Default-ACL-Name)</code> <table><tr><th>Custom-ACL-Name</th><th>Service-ACL-Name</th><th>Default-ACL-Name</th><th></th></tr><tr><td>None</td><td>None</td><td>None</td><td>None</td></tr><tr><td>None</td><td>None</td><td>PERM_ALL</td><td>PERM_ALL</td></tr><tr><td>None</td><td>BLOCK_IPv6</td><td>PERM_ALL</td><td>BLOCK_IPv6</td></tr><tr><td>BLOCK_SMTp</td><td>BLOCK_IPv6</td><td>PERM_ALL</td><td>BLOCK_SMTp</td></tr></table>	Custom-ACL-Name	Service-ACL-Name	Default-ACL-Name		None	None	None	None	None	None	PERM_ALL	PERM_ALL	None	BLOCK_IPv6	PERM_ALL	BLOCK_IPv6	BLOCK_SMTp	BLOCK_IPv6	PERM_ALL	BLOCK_SMTp
Custom-ACL-Name	Service-ACL-Name	Default-ACL-Name																				
None	None	None	None																			
None	None	PERM_ALL	PERM_ALL																			
None	BLOCK_IPv6	PERM_ALL	BLOCK_IPv6																			
BLOCK_SMTp	BLOCK_IPv6	PERM_ALL	BLOCK_SMTp																			
<code>&lt;dictionary&gt;.except(&lt;key_1&gt;[, &lt;key_2&gt;[, ...]])</code>	<code>&lt;dictionary&gt; &lt;key_1&gt;, &lt;key_2&gt; ..</code>	<code>\$request.RAD_CHECK.except('Auth-Type')</code> <code>{ "Auth-Type": "CHAP", "Pool-Name": "NAT-10" } { "Pool-Name": "NAT-10" }</code>																				
<code>&lt;string&gt;.format_mac([&lt;delimiter&gt;[, &lt;groups&gt;]])</code>	<code>MAC- &lt;string&gt; &lt;groups&gt; &lt;delimiter&gt; . &lt;delimiter&gt; , . &lt;groups&gt; , 6.</code>	<code>\$request.RAD_REQUEST.Agent-Remote-Id.format_mac(":")</code> <ul style="list-style-type: none"><li>"acf1.dfaf.42c0" "AC:F1:DF:AF:42:C0"</li><li>"BA46EC2EA786" "BA:46:EC:2E:A7:86"</li></ul> <code>\$request.RAD_REQUEST.Calling-Station-Id.format_mac(".", 3)</code> <ul style="list-style-type: none"><li>"AC:F1:DF:AF:42:C0" "ACF1.DFAF.42C0"</li><li>"BA46EC2EA786" "BA46.EC2E.A786"</li></ul>																				
<code>&lt;number&gt;.gigabytes()</code>	<code>&lt;number&gt; 2<sup>30</sup>.</code>	<code>4 * \$request.RAD_REQUEST.try("Acct-Input-Gigawords", "0").to_i().gigabytes()</code> <ul style="list-style-type: none"><li>"0" 0</li><li>"2" 8589934592</li></ul>																				
<code>&lt;string&gt;.ip4_and(&lt;mask_string&gt;)</code>	<code>IPv4- &lt;string&gt; &lt;mask_string&gt; .</code>	<code>\$request.RAD_REQUEST.Framed-IP-Address.ip4_or("255.255.0.0")</code> <ul style="list-style-type: none"><li>"192.168.154.37" "192.168.0.0"</li></ul> <code>\$request.RAD_REQUEST.Framed-IP-Address.ip4_or("255.255.240.0")</code> <ul style="list-style-type: none"><li>"10.83.5.1" "10.83.0.0"</li></ul>																				
<code>&lt;string&gt;.ip4_or(&lt;mask_string&gt;)</code>	<code>IPv4- &lt;string&gt; &lt;mask_string&gt; . , &lt;mask_string&gt; .</code>	<code>\$request.RAD_REQUEST.Framed-IP-Address.ip4_or("0.0.255.255")</code> <ul style="list-style-type: none"><li>"192.168.154.37" "192.168.255.255"</li></ul> <code>\$request.RAD_REQUEST.Framed-IP-Address.ip4_or("0.0.15.255")</code> <ul style="list-style-type: none"><li>"10.83.5.1" "10.83.15.255"</li></ul>																				
<code>&lt;string&gt;.ip4_scan()</code>	<code>&lt;string&gt; IPv4-. &lt;string&gt;, . , .</code>	<code>\$request.RAD_REQUEST.Raw-Ip.ip4_scan()</code> <ul style="list-style-type: none"><li>"vlan102260.172.16.1.1.2" "60.172.16.1.1"</li><li>"172.16.0." ""</li></ul>																				
<code>&lt;list&gt;.join([&lt;delimiter&gt;])</code>	<code>&lt;list&gt; &lt;delimiter&gt;. &lt;delimiter&gt; , .</code>	<code>\$response.RAD_REPLY.Rules.join(";")</code> <ul style="list-style-type: none"><li>[2048, 1024, None, 100] "2048;1024;;100"</li></ul>																				
<code>&lt;dictionary&gt;.length()</code> <code>&lt;list&gt;.length()</code> <code>&lt;string&gt;.length()</code>	<code>&lt;list&gt;, &lt;dictionary&gt; &lt;string&gt;.</code>	<code>\$response.RAD_REPLY.DHCP-Vendor.length()</code> <ul style="list-style-type: none"><li>"http://10.20.30.40:4321/acs" 27</li></ul> <code>\$response.RAD_REPLY.Rules.length()</code> <ul style="list-style-type: none"><li>[2048, 1024, None, 100] 4</li></ul>																				

<code>&lt;string&gt;.lower()</code>	<code>&lt;string&gt; .</code>	<pre>\$request.RAD_REQUEST.User-Name.lower()</pre> <ul style="list-style-type: none"> <li>"sUpErUsEr.321" "superuser.321"</li> <li>"TEST-LOGIN" "test-login"</li> </ul>
<code>&lt;list_of_kvpair&gt;.map_join([&lt;delimiter&gt;])</code>	<code>&lt;list_of_kvpair&gt; (,) , . &lt;delimiter&gt;. &lt;delimiter&gt; , .</code>	<pre>\$response.RAD_REPLY.Cisco-Attributes.pairs().map_join("=")</pre> <ul style="list-style-type: none"> <li>{"ip:dns-servers": "10.1.14.1", "ip": "inac1: blockdns"} [{"ip=inac1: blockdns", "ip:dns-servers=10.1.14.1"}]</li> </ul>
<pre>&lt;dictionary&gt;.merge(&lt;key&gt;, &lt;value&gt;)</pre> <pre>&lt;dictionary&gt;.merge(&lt;key_value_list&gt;)</pre> <pre>&lt;dictionary&gt;.merge(&lt;list_of_kvpair&gt;)</pre> <pre>&lt;dictionary&gt;.merge(&lt;additional_dictionary&gt;)</pre>	<pre>&lt;dictionary&gt;. &lt;dictionary&gt; , . :</pre> <ul style="list-style-type: none"> <li>&lt;key&gt; &lt;value&gt;;</li> <li>&lt;key_value_list&gt; : —, —;</li> <li>&lt;list_of_kvpair&gt; (,);</li> <li>&lt;additional_dictionary&gt;.</li> </ul>	<pre>\$request.RAD_REQUEST.Cisco-AVPair.merge("xpgk-owner-type=User".split("="))</pre> <ul style="list-style-type: none"> <li>{"xpgk-request-type": "number"} {"xpgk-request-type": "number", "xpgk-owner-type": "User"}</li> <li>{"xpgk-owner-type": "Gateway"} {"xpgk-owner-type": "User"}</li> </ul>
<code>&lt;value&gt;.mod(&lt;divider&gt;)</code>	<code>&lt;value&gt; &lt;divider&gt; &lt;value&gt; to_i(). %.</code>	<pre>\$request.RAD_REQUEST.Acct-Session-Time.mod(86400)</pre> <ul style="list-style-type: none"> <li>"325752" 66552</li> <li>325 325</li> </ul>
<code>&lt;string&gt;.normalize_mac()</code>	<code>MAC- &lt;string&gt; ,: , .</code>	<pre>\$request.RAD_REQUEST.Agent-Remote-Id.normalize_mac()</pre> <ul style="list-style-type: none"> <li>"acfl.dfaf.42c0" "AC-F1-DF-AF-42-C0"</li> <li>"428d01c53db7" "42-8D-01-C5-3D-B7"</li> </ul>
<code>&lt;string&gt;.pad_left(&lt;length&gt;, &lt;character&gt;)</code>	<code>&lt;string&gt; &lt;length&gt; &lt;character&gt;. &lt;left&gt; ngth, &lt;string&gt;.</code>	<pre>"0x" + \$var.Port-Number.to_hex_from_int().substring(2).pad_left(12, "0")</pre> <ul style="list-style-type: none"> <li>24 "0x0000000000018"</li> </ul>
<code>&lt;string&gt;.pad_right(&lt;length&gt;, &lt;character&gt;)</code>	<code>&lt;string&gt; &lt;length&gt; &lt;character&gt;. &lt;left&gt; ngth, &lt;string&gt;.</code>	<pre>\$var.Port-Number.to_hex_from_int().pad_right(14, "0")</pre> <ul style="list-style-type: none"> <li>39 "0x270000000000"</li> </ul>
<code>&lt;dictionary&gt;.pairs()</code>	<code>&lt;dictionary&gt; (,) , .</code>	<pre>\$response.RAD_REPLY.Cisco-Attributes.pairs()</pre> <ul style="list-style-type: none"> <li>{"ip:dns-servers": "10.1.14.1", "ip": "inac1: blockdns"} [{"ip", "inac1: blockdns"}, {"ip:dns-servers", "10.1.14.1"}]</li> </ul>
<code>&lt;string&gt;.regexp_replace(&lt;regexp&gt;[, &lt;replacement_template&gt;])</code>	<code>&lt;string&gt; &lt;regexp&gt; &lt;replacement_template&gt;. &lt;replacement_template&gt; ,. . re.sub Python \ .</code>	<pre>\$request.RAD_REQUEST.User-Name.regexp_replace("^office([0-9]+)?\$", "\\1")</pre> <ul style="list-style-type: none"> <li>"office2" "2"</li> <li>"office123456789" "123456789"</li> </ul> <pre>\$var.Circuit-Id.regexp_replace("^0x0005(?:P&lt;vlan&gt;[0-9a-f]{4})(?P&lt;slot&gt;[0-9a-f]{4})(?P&lt;port&gt;[0-9a-f]{2})\$", "0x0006g&lt;vlan&gt;g&lt;slot&gt;00g&lt;port&gt;")</pre> <ul style="list-style-type: none"> <li>"0x0005043d000016" "0x0006043d00000016"</li> </ul>
<code>&lt;string&gt;.replace(&lt;string_to_replace&gt;[, &lt;replacement&gt;])</code>	<code>&lt;string&gt; &lt;string_to_replace&gt; &lt;replacement&gt;. &lt;replacement&gt; , .</code>	<pre>\$request.RAD_REQUEST.Agent-Circuit-Id.replace("0x")</pre> <ul style="list-style-type: none"> <li>"0x10006a12" "10006a12"</li> </ul>
<pre>&lt;list&gt;.reverse()</pre> <pre>&lt;string&gt;.reverse()</pre>	<code>&lt;string&gt; &lt;list&gt; .</code>	<pre>\$request.RAD_REQUEST.Cisco-Attributes.h323-incoming-conf-id.reverse()</pre> <ul style="list-style-type: none"> <li>"A0E8218F 9A4011E4" "4E1104A9 F8128E0A"</li> </ul> <pre>\$var.DNS-Servers-List.reverse()</pre> <ul style="list-style-type: none"> <li>["10.1.0.254", "10.254.0.254"] ["10.254.0.254", "10.1.0.254"]</li> </ul>

<code>&lt;string&gt;.split([&lt;separator&gt;[, &lt;maxsplit&gt;]])</code>	<code>&lt;string&gt; ( — ) - &lt;separator&gt;. str. split Python.</code>	<code>\$response.RAD_REPLY.DHCP-Classless-Static-Route.replace((".", ";").split(";"))</code> <ul style="list-style-type: none"> <li>"24;192.168.123;10.1.1.1" ["24", "192", "168", "123", "10", "1", "1", "1"]</li> </ul> <code>\$var.Routed-Subnets.split(",")</code> <ul style="list-style-type: none"> <li>"192.168.14.128/29,,10.0.0.0/8" ["192.168.14.128/29", "", "10.0.0.0/8"]</li> </ul>
<code>&lt;string&gt;.strip()</code>	<code>&lt;string&gt;.</code>	<code>\$request.RAD_REQUEST.User-Name.strip()</code> <ul style="list-style-type: none"> <li>" Vasiliy Terkin " "Vasiliy Terkin"</li> </ul>
<code>&lt;string&gt;.substring(&lt;from_position&gt;[, &lt;to_position&gt;])</code>	<code>&lt;string&gt;: &lt;from_position&gt; —, &lt;to_position&gt; —, . &lt;to_position&gt;, .</code> <code>— .</code>	<code>\$request.RAD_REQUEST.DHCP-Relay-Remote-Id.substring(6)</code> <ul style="list-style-type: none"> <li>"0x010a31302e3232312e332e34" "31302e3232312e332e34"</li> </ul> <code>\$request.RAD_REQUEST.DHCP-Relay-Circuit-Id.substring(12,14)</code> <ul style="list-style-type: none"> <li>"0x0005010d0004e3a1" "04"</li> <li>"0x0005010d00c" "c"</li> </ul> <code>\$request.RAD_REQUEST.DHCP-Relay-Circuit-Id.substring(-4, -2)</code> <ul style="list-style-type: none"> <li>"0x0005010d0004e3a1" "e3"</li> <li>"0x0005010d00c" "d0"</li> </ul> <code>\$request.RAD_REQUEST.DHCP-Relay-Circuit-Id.substring(-2)</code> <ul style="list-style-type: none"> <li>"0x0005010d0004e3a1" "a1"</li> <li>"0x0005010d00c" "0c"</li> </ul>
<code>&lt;string&gt;.to_date(&lt;format&gt;)</code>	<code>&lt;format&gt; (datetime.datetime Python). datetime.strptime Python.</code>	<code>\$request.RAD_REQUEST.Event-Timestamp.to_date("%d.%m.%Y %H:%M:%S")</code> <ul style="list-style-type: none"> <li>"06.08.1961 06:00:00" datetime.datetime(1961, 8, 6, 6, 0)</li> </ul>
<code>&lt;number&gt;.to_days()</code>	<code>&lt;number&gt; (datetime.timedelta Python). &lt;number&gt; —, .</code>	<code>\$session.attributes.Trial-Period-Days.to_days()</code> <ul style="list-style-type: none"> <li>"-5" datetime.timedelta(-5)</li> <li>123 datetime.timedelta(123)</li> </ul>
<code>&lt;number&gt;.to_hex_from_int()</code> 4.2.10.6 <code>&lt;number&gt;.to_hex()</code>	<code>&lt;number&gt; 0x.</code>	<code>\$var.Service-Priority.to_hex_from_int()</code> <ul style="list-style-type: none"> <li>24 "0x18"</li> <li>-237 "-0xed"</li> </ul>
<code>&lt;string&gt;.to_hex_from_str()</code> c 4.2.10.6	<code>, &lt;string&gt;.</code>	<code>\$request.RAD_REQUEST.Agent-Remote-Id.to_hex_from_str()</code> <ul style="list-style-type: none"> <li>"a8:f9:4b:5b:1b:02" "61383a66393a34623a35623a31623a3032"</li> <li>"172.17.0.4" "3137322e31372e302e34"</li> </ul>
<code>&lt;number&gt;.to_hours()</code>	<code>&lt;number&gt; (datetime.timedelta Python). &lt;number&gt; —, .</code>	<code>\$provider_profile.attributes.Acct-UTC-Offset.to_hours()</code> <ul style="list-style-type: none"> <li>"-5" datetime.timedelta(-1, 68400)</li> <li>123 datetime.timedelta(5, 10800)</li> </ul>
<code>&lt;value&gt;.to_i([&lt;base&gt;])</code>	<code>&lt;value&gt; . &lt;value&gt; —, (« »). &lt;value&gt;, &lt;base&gt;. &lt;base&gt;, . int Python.</code>	<code>\$request.RAD_REQUEST.Bill-Total-Amount.to_i()</code> <ul style="list-style-type: none"> <li>"012" 12</li> <li>" - 12345 " -12345</li> <li>-123.45 -123</li> </ul> <code>\$request.RAD_REQUEST.Agent-Circuit-Id.substring(2).to_i(16)</code> <ul style="list-style-type: none"> <li>"0x100" 256</li> </ul>

<code>&lt;number&gt;.to_minutes()</code>	<code>&lt;number&gt; (datetime.timedelta Python). &lt;number&gt; — , .</code>	<code>\$customer_profile.attributes.Timeout.to_minutes()</code>  <ul style="list-style-type: none"> <li>"-5" <code>datetime.timedelta(-1, 86100)</code></li> <li>123 <code>datetime.timedelta(0, 7380)</code></li> </ul>
<code>&lt;value&gt;.to_s ([&lt;format&gt;])</code>	<code>&lt;value&gt; . &lt;value&gt; — (datetime.datetime Python), &lt;format&gt;( ). datetime. strftime Python.</code>	<code>(\$var.Connection-Date.to_date("%d.%m.%Y %H:%M:%S") + 1. to_seconds()).to_s("%Y-%m-%dT%H:%M:%S")</code>  <ul style="list-style-type: none"> <li><code>datetime.datetime(1961, 4, 12, 9, 7)</code> "1961-04-12T09:07:00"</li> </ul> <code>"QU;" + (\$customer_profile.attributes.Upload-Rate.to_i() / 1024).to_i().to_s() + ";"</code>  <ul style="list-style-type: none"> <li>"250000" "QU;244;"</li> <li>"256000" "QU;250;"</li> </ul>
<code>&lt;number&gt;.to_seconds()</code>	<code>&lt;number&gt; (datetime.timedelta Python). &lt; number&gt; — , .</code>	<code>\$var.Delay-In-Seconds.to_seconds()</code>  <ul style="list-style-type: none"> <li>"-5" <code>datetime.timedelta(-1, 86395)</code></li> <li>123 <code>datetime.timedelta(0, 123)</code></li> </ul>
<code>&lt;string&gt;. to_subnet_suffix()</code>	<code>IPv4- &lt;string&gt; ( CIDR-).</code>	<code>\$response.RAD_REPLY.Framed-IP-Netmask.to_subnet_suffix()</code>  <ul style="list-style-type: none"> <li>"255.255.255.248" 29</li> <li>"255.255.240.0" 20</li> </ul>
<code>&lt;number&gt;. to_subnet_mask()</code>	<code>IPv4- &lt;number&gt; . &lt;number&gt; — 0 32, .</code>	<code>\$customer_profile.attributes.Custom-Netmask-Prefix. to_subnet_mask()</code>  <ul style="list-style-type: none"> <li>30 "255.255.255.252"</li> <li>"21" "255.255.248.0"</li> </ul>
<code>&lt;value&gt;.try(&lt;key&gt;[, &lt;default_value&gt;])</code>	<code>&lt;key&gt; &lt;value&gt;, &lt;default_value&gt;, . &lt;de fault_value&gt; , (None). &lt;value&gt;:   <ul style="list-style-type: none"> <li>(None) — &lt;default_value&gt; &lt;key&gt;. try .</li> <li>— &lt;key&gt;, . &lt;key&gt; — .</li> </ul> </code>	<ul style="list-style-type: none"> <li><code>\$request.RAD_REQUEST.try("ERX-Service-Session")</code></li> <li><code>\$customer_profile.provider_profiles.try(0).try("equipment_id")</code></li> <li><code>\$var.try("Service-Auth-Speed-Limits").try("Rate", "100000000")</code></li> <li><code>\$response.try("RAD_REPLY").try("Cisco-Account-Info").present?()</code></li> </ul>
<code>&lt;string&gt;.unhex()</code>	<code>&lt;string&gt;, ( ASCII-HEX). 0x, .</code>	<code>\$request.RAD_REQUEST.DHCP-Relay-Remote-Id.unhex()</code>  <ul style="list-style-type: none"> <li>"61383a66393a34623a35623a31623a3032" "a8:f9:4b:5b:1b:02"</li> <li>"0x3137322e31362e3132302e323130" "172.16.120.210"</li> </ul>
<code>&lt;string&gt;.upper()</code>	<code>&lt;string&gt; .</code>	<code>\$request.RAD_REQUEST.User-Name.upper()</code>  <ul style="list-style-type: none"> <li>"SuPeRuSeR-123" "SUPERUSER-123"</li> <li>"test-login" "TEST-LOGIN"</li> </ul>