Service Location Working Group
Internet Draft
Category: Individual Contribution
Expiration Date: November 98

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May 1998

TN3270E Service Location and Session Balancing Templates
draft-naugle-tn3270e-serv-loc-template-00.txt

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Abstract

These Service Location Protocol templates are to be used to provide service attributes associated with TN3270E servers to client software, or to end users. For more information refer to TN3270E Service Location and Session Balancing Internet-Draft, [1] work in progress.

1. Table of Contents

2. Communications Server Service Templates

Communications Server Service Template

---------- template begins here ----------

URL:service:commserver://<addr-spec>:<port-number>

The communications server service type is registered whenever the communications software is loaded on the server. It describes generic attributes of the communications server. These attributes are also repeated on the other service types provided.

Release = <version/release>

This is the version and release level of the commserver advertising services. Its format is vv.rr.mm where "vv" is the major version number, "rr" is the minor version number, and "mm" is the modification level. All numbers are padded on the left with zeroes to two characters.
Example: version 3, release 0, mod level 0 is "03.00.00"

Platform = <platform>

This is the network operating system platform underlying the advertising service. The defined values are:

IW Server uses the IntranetWare network operating system

NT Server uses the Microsoft NT operating system

OS2 Server uses the OS2 operating system

AIX Server uses the AIX operating system

Protocol = <protocol>

This is the protocol(s) supported by server providing this service.

The defined values are:

IP Server supports client connections over IP (TCP/IP or UDP/IP)

IPX Server supports client connections over IPX (SPX/IPX)

Server name = <server name>

This is the name of the server that was configured during installation. This value has meaning only for the IW platform.

---------- template ends here ----------

3. TN3270 Service Template

---------- template begins here ----------

URL: service:tn3270://<addr-spec>:<port-number>

The tn3270 service provides 3270 gateway access to an SNA network via the TN3270 protocol. The attributes reflect the types of 3270 devices, LU Pools, and load information available on the server.

Load = <server_load>:

This is the load balancing quantity to use in determining the least loaded comm server to attach to for the service. The range of valid values is an integral 0 to 100 with 0 indicating the lowest possible load and 100 the highest.

LU Pool = <pool_name>,

<pool_name>/t<dev-type> ,

<pool_name>/t<dev_type>, ...

<pool_name>/t<dev-type>

Identifies the LU pool names of LU pools available for use on this service with the associated device types supported in each pool. Each value is a record where the first token is the pool name of the pool and the second token is a device type supported in that pool. A pool name without a device type indicates that LUs of unknown type are included in the pool. Records associated with a given pool name are repeated for each supported device type. A given pool is included in a

registration request if any PU profile that contributes at least one LU to the pool is active on the server. The range of valid dev_types are:

dev_type	Meaning
3270002	**Lu Type 2 Model 2**
3270003	**Lu Type 2 Model 3**
3270004	**Lu Type 2 Model 4**
3270005	**Lu Type 2 Model 5**
3270DSC	Printer LU

BIND, DATA, RESPONSES, SCS, SYSREQ

These keyword attributes describe the TN3270e functions supported by this service.

BIND	The server supports the SNA bind image function
DATA	The non-SNA 3270 data stream is supported by server
RESPONSES	The server supports SNA response mode
SCS	The server supports SNA 3270 SCS data stream
SYSREQ	The SYSREQ keyboard key is supported on server

They are present in the service advertisement if the functions they describe are available.

Security = <security>

This field will contain the security technique supported by the server. The actual values are currently being defined in the Internet standards body.

RFC1576, RFC1646, RFC1647

The RFC numbers that document features supported by the service. Current RFC's for TN3270 include 1576, 1646, and 1647.

---------- template ends here ----------

4. Security Consideration

This information was taken from Service Templates and service: Schemes Internet-Draft [3] work in progress.

Service type templates provide information that is used to interpret information obtained by the Service Location Protocol. If these templates are modified or if false templates are distributed, services may not correctly register themselves, or clients might not be able to interpret service information.

The service: URLs themselves specify the service access point and protocol for a particular service type. These service URLs could be distributed and indicate the location of a service other than that normally wanted to used. The Service Location Protocol [2] distributes service: URLs and has an authentication mechnism that allows service: URLs of registered services to be signed and for the signatures to be verified by clients.

5. References

[1] J. Naugle, K. Kasthurirangan, G. Ledford. TN3270E Service Location and Session Balancing Internet-Draft, May 98. (work in progress)

[2] J. Veizades, E. Guttman, C. Perkins, and S. Kaplan. Service Location Protocol. RFC 2165, July 1997.

[3] E. Guttman, C. Perkins, J. Kempf. Service Templates and service: Schemes Internet-Draft, March 1998. (work in progress)

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