

EXHIBIT 2

Data Co Exhibit 1013
Data Co v. Bright Data

PROTOCOL STANDARD FOR A NetBIOS SERVICE
ON A TCP/UDP TRANSPORT:
CONCEPTS AND METHODS

ABSTRACT

This RFC defines a proposed standard protocol to support NetBIOS services in a TCP/IP environment. Both local network and internet operation are supported. Various node types are defined to accommodate local and internet topologies and to allow operation with or without the use of IP broadcast.

This RFC describes the NetBIOS-over-TCP protocols in a general manner, emphasizing the underlying ideas and techniques. Detailed specifications are found in a companion RFC, "Protocol Standard For a NetBIOS Service on a TCP/UDP Transport: Detailed Specifications".

SUMMARY OF CONTENTS

1. STATUS OF THIS MEMO	6
2. ACKNOWLEDGEMENTS	6
3. INTRODUCTION	7
4. DESIGN PRINCIPLES	7
5. OVERVIEW OF NetBIOS	10
6. NetBIOS FACILITIES SUPPORTED BY THIS STANDARD	15
7. REQUIRED SUPPORTING SERVICE INTERFACES AND DEFINITIONS	15
8. RELATED PROTOCOLS AND SERVICES	16
9. NetBIOS SCOPE	16
10. NetBIOS END-NODES	16
11. NetBIOS SUPPORT SERVERS	18
12. TOPOLOGIES	20
13. GENERAL METHODS	23
14. REPRESENTATION OF NETBIOS NAMES	25
15. NetBIOS NAME SERVICE	27
16. NetBIOS SESSION SERVICE	48
17. NETBIOS DATAGRAM SERVICE	55
18. NODE CONFIGURATION PARAMETERS	58
19. MINIMAL CONFORMANCE	59
REFERENCES	60
APPENDIX A - INTEGRATION WITH INTERNET GROUP MULTICASTING	61
APPENDIX B - IMPLEMENTATION CONSIDERATIONS	62

TABLE OF CONTENTS

1.	STATUS OF THIS MEMO	6
2.	ACKNOWLEDGEMENTS	6
3.	INTRODUCTION	7
4.	DESIGN PRINCIPLES	8
4.1	PRESERVE NetBIOS SERVICES	8
4.2	USE EXISTING STANDARDS	8
4.3	MINIMIZE OPTIONS	8
4.4	TOLERATE ERRORS AND DISRUPTIONS	8
4.5	DO NOT REQUIRE CENTRAL MANAGEMENT	9
4.6	ALLOW INTERNET OPERATION	9
4.7	MINIMIZE BROADCAST ACTIVITY	9
4.8	PERMIT IMPLEMENTATION ON EXISTING SYSTEMS	9
4.9	REQUIRE ONLY THE MINIMUM NECESSARY TO OPERATE	9
4.10	MAXIMIZE EFFICIENCY	10
4.11	MINIMIZE NEW INVENTIONS	10
5.	OVERVIEW OF NetBIOS	10
5.1	INTERFACE TO APPLICATION PROGRAMS	10
5.2	NAME SERVICE	11
5.3	SESSION SERVICE	12
5.4	DATAGRAM SERVICE	13
5.5	MISCELLANEOUS FUNCTIONS	14
5.6	NON-STANDARD EXTENSIONS	15
6.	NetBIOS FACILITIES SUPPORTED BY THIS STANDARD	15
7.	REQUIRED SUPPORTING SERVICE INTERFACES AND DEFINITIONS	15
8.	RELATED PROTOCOLS AND SERVICES	16
9.	NetBIOS SCOPE	16
10.	NetBIOS END-NODES	16
10.1	BROADCAST (B) NODES	16
10.2	POINT-TO-POINT (P) NODES	16
10.3	MIXED MODE (M) NODES	16
11.	NetBIOS SUPPORT SERVERS	18
11.1	NetBIOS NAME SERVER (NBNS) NODES	18
11.1.1	RELATIONSHIP OF THE NBNS TO THE DOMAIN NAME SYSTEM	19
11.2	NetBIOS DATAGRAM DISTRIBUTION SERVER (NBDD) NODES	19
11.3	RELATIONSHIP OF NBNS AND NBDD NODES	20
11.4	RELATIONSHIP OF NetBIOS SUPPORT SERVERS AND B NODES	20
12.	TOPOLOGIES	20
12.1	LOCAL	20

12.1.1	B NODES ONLY	21
12.1.2	P NODES ONLY	21
12.1.3	MIXED B AND P NODES	21
12.2	INTERNET	22
12.2.1	P NODES ONLY	22
12.2.2	MIXED M AND P NODES	23
13.	GENERAL METHODS	23
13.1	REQUEST/RESPONSE INTERACTION STYLE	23
13.1.1	RETRANSMISSION OF REQUESTS	24
13.1.2	REQUESTS WITHOUT RESPONSES: DEMANDS	24
13.2	TRANSACTIONS	25
13.2.1	TRANSACTION ID	25
13.3	TCP AND UDP FOUNDATIONS	25
14.	REPRESENTATION OF NETBIOS NAMES	25
14.1	FIRST LEVEL ENCODING	26
14.2	SECOND LEVEL ENCODING	27
15.	NetBIOS NAME SERVICE	27
15.1	OVERVIEW OF NetBIOS NAME SERVICE	27
15.1.1	NAME REGISTRATION (CLAIM)	27
15.1.2	NAME QUERY (DISCOVERY)	28
15.1.3	NAME RELEASE	28
15.1.3.1	EXPLICIT RELEASE	28
15.1.3.2	NAME LIFETIME AND REFRESH	29
15.1.3.3	NAME CHALLENGE	29
15.1.3.4	GROUP NAME FADE-OUT	29
15.1.3.5	NAME CONFLICT	30
15.1.4	ADAPTER STATUS	31
15.1.5	END-NODE NBNS INTERACTION	31
15.1.5.1	UDP, TCP, AND TRUNCATION	31
15.1.5.2	NBNS WACK	32
15.1.5.3	NBNS REDIRECTION	32
15.1.6	SECURED VERSUS NON-SECURED NBNS	32
15.1.7	CONSISTENCY OF THE NBNS DATA BASE	32
15.1.8	NAME CACHING	34
15.2	NAME REGISTRATION TRANSACTIONS	34
15.2.1	NAME REGISTRATION BY B NODES	34
15.2.2	NAME REGISTRATION BY P NODES	35
15.2.2.1	NEW NAME, OR NEW GROUP MEMBER	35
15.2.2.2	EXISTING NAME AND OWNER IS STILL ACTIVE	36
15.2.2.3	EXISTING NAME AND OWNER IS INACTIVE	37
15.2.3	NAME REGISTRATION BY M NODES	38
15.3	NAME QUERY TRANSACTIONS	39
15.3.1	QUERY BY B NODES	39
15.3.2	QUERY BY P NODES	40
15.3.3	QUERY BY M NODES	43
15.3.4	ACQUIRE GROUP MEMBERSHIP LIST	43
15.4	NAME RELEASE TRANSACTIONS	44
15.4.1	RELEASE BY B NODES	44

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.