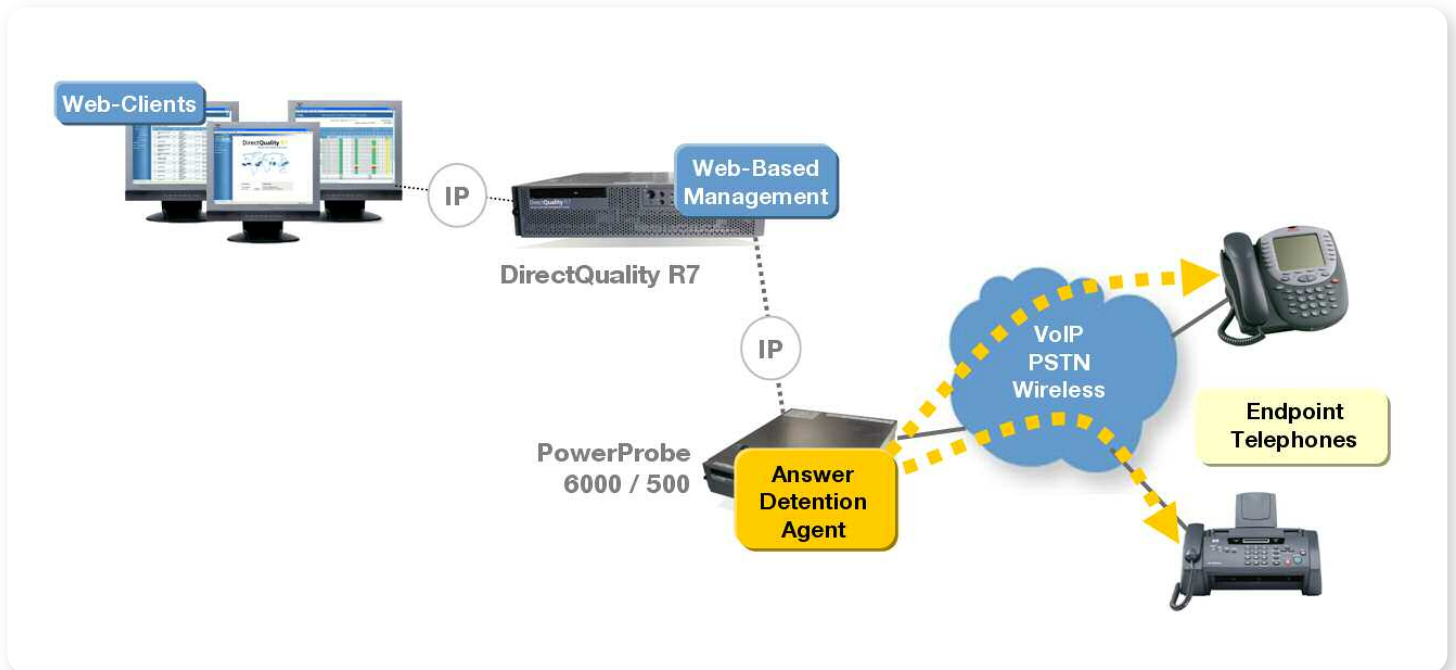


Answer Detection Agent

Active Service Assurance



Test Layout

Overview

Tektronix' Answer Detection Test Agent provides high performance connectivity testing by measuring call connection setup using ISDN PRI signaling.

The Answer Detection test agent uses Minacom's VQM24/30 measurement module, which provides a T1/E1 interface and PRI call progress analysis (as per ITU-T Q.931).

The test consists of measuring call connection setup delays, using the PRI messages exchanged over the network for call control, then hanging up when the call is answered by end-users and termination devices.

Using this method you can ensure minimal billing fees, perform hundreds of test calls within minutes, and troubleshoot service problems quickly.

Key Features/Benefits:

T1 ISDN PRI Options

Signaling

- ▶ 4ESS, 5ESS
- ▶ DMS250, DMS100
- ▶ National ISDN-2
- ▶ NTT INS1500

Line Coding

- ▶ SF (D3, D4)
- ▶ ESF

Framing

- ▶ AMI
- ▶ AMI with B7 stuffing
- ▶ B8ZS

E1 ISDN PRI Options

Signaling

- ▶ 1TR6
- ▶ DASS2
- ▶ DPNSS
- ▶ CTR4 (Euro-ISDN)
- ▶ QSIG

- ▶ TPH
- ▶ VN3

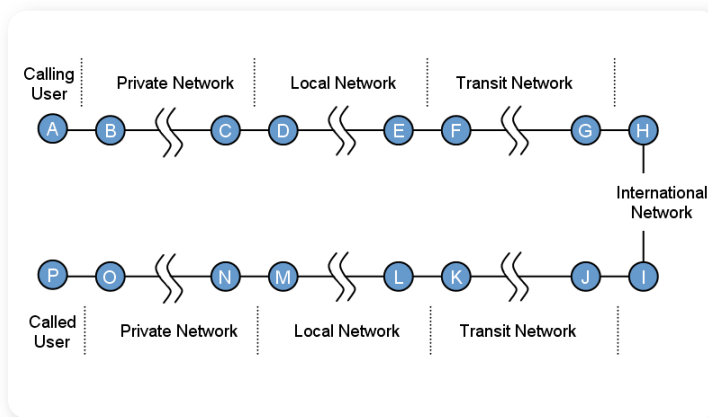
Line Coding

- ▶ HDB3

Measurements

Cause Code

The Cause Code generated after an ISDN Answer Detection test call indicates the result of the call connection based on the PRI messages exchanged over the network. When a test call does not complete execution, the Cause Code indicates why the call failed.



The Cause Location generated after an ISDN Answer Detection test call indicates where, in the routing of the call, the cause code was generated.

WEB Reports

The screenshot shows a web report titled "Call Connection Performance" with the following data:

Call Identification				Call Connection				Return Code					
City	Destination	Carrier	Off Hook	CDC	Cause No.	Cause Loc.	PDD	Ring Dur.	Call Dur.	Event Timestamp	Port	Test ID	Return Code
Montreal, Minicom Engineering Lab	Canada	3224567	2005-04-07 16:53:54	COM	-	-	0.2	19.1	24.2	2005-04-07 16:55:35	T52 VQM4_111	4	200: Ok.
Canada - DIRECT													
Montreal, QC	Canada	5143980973	2005-01-06 19:31:26	COM	-	-	1.1	9.1	26.6	2005-01-06 19:40:48	QA4 VQM4 (3)_119	66136	200: Ok.
Montreal, QC	Canada	5148758066	2005-01-20 15:41:06	COM	-	-	1.0	10.6	24.7	2005-01-20 15:41:01	QA4 VQM4 (1)_111	66263	200: Ok.
Montreal, QC	Canada	256	2005-02-10 12:02:23	COM	-	-	0.2	0.0	12.2	2005-02-10 17:03:07	IkoDemo VQM4 1-2_012	282	200: Ok.
Canada - DIRECT													
Ottawa, ON	Japan	Shimonoseki	555101253	CARRIER_QA101 (555101)	2005-01-27 11:57:38	BUS	-	-	35.8	2005-01-27 11:58:00	QA1 VQM4 (1)_119	1722	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555102253	CARRIER_QA101 (555102)	2005-01-27 11:58:52	BUS	-	-	0.7	2005-01-27 11:59:16	QA1 VQM4 (1)_119	1723	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555103253	CARRIER_QA101 (555103)	2005-01-27 12:00:08	BUS	-	-	0.8	2005-01-27 12:00:31	QA1 VQM4 (1)_119	1724	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555104253	CARRIER_QA101 (555104)	2005-01-27 12:01:23	BUS	-	-	0.8	2005-01-27 12:01:46	QA1 VQM4 (1)_119	1725	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555105253	CARRIER_QA101 (555105)	2005-01-27 12:02:38	BUS	-	-	0.8	2005-01-27 12:03:01	QA1 VQM4 (1)_119	1726	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555106253	CARRIER_QA101 (555106)	2005-01-27 12:03:53	BUS	-	-	0.8	2005-01-27 12:04:16	QA1 VQM4 (1)_119	1727	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555107253	CARRIER_QA101 (555107)	2005-01-27 12:05:08	BUS	-	-	0.8	2005-01-27 12:05:31	QA1 VQM4 (1)_119	1728	177: Busy.
Ottawa, ON	Japan	Shimonoseki	555108253	CARRIER_QA101 (555108)	2005-01-27 12:06:22	BUS	-	-	0.8	2005-01-27 12:06:45	QA1 VQM4 (1)_119	1729	177: Busy.

Compares Network PRI Signalling with Subscriber Audio Perception

For Further Information

Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology.

Please visit www.tektronix.com

Contact Tektronix:

Please visit www.tektronix.com/communications

Phone:
1-800-833-9200 option 1
+1-469-330-4000
Active Test Office:
(514) 380-5530

Locate your nearest Tektronix representative www.tektronix.com/contactus

