

Everything
you need for
voice and data.



Office in a Box.

1 There are many established PBX vendors. Why is ADTRAN entering the PBX market?

ADTRAN® has a 19-year successful history in the telecom market dating back to our original products that helped public telephone companies upgrade to high speed digital services worldwide. Today, we produce more than 1,300 products for both carrier and enterprise markets, and one of our competencies is the ability to design and engineer lower cost, integrated solutions.

Our most recent enterprise successes are in the SMB router market, and we believe a natural extension is to integrate the PBX/Key System functions. The integrated products will target one of the fastest growing segments – the VoIP convergence market—and represents tremendous growth opportunities for ADTRAN and our partners.

2 What is ADTRAN's go-to-market strategy?

ADTRAN is entering the IP PBX market in a measured approach, knowing that today's PBX equipment represents decades of development. The initial offering will provide standard PBX functionality with full-featured LAN and WAN function. New firmware will be released that adds more sophisticated PBX and telephony features and applications.

3 Is ADTRAN committed long term to the PBX and IP Telephony market?

Yes. ADTRAN recognizes that voice-data convergence and IP-enabled next generation solutions compromise the strategic direction for the industry and our company. ADTRAN's short- and long-term plans are to regularly introduce new products into the market and grow our portfolio of IP enabled voice-data convergence solutions, including PBX, Key system and IP telephony.

4 Are there any preconfigured 4200-level systems with NIM and/orVIM Modules already installed in the NetVanta 7100?

No. The NetVanta 7100 only ships as the #1200796L1. The NIM/VIM modules and phones are also ordered individually.

5 What are the target applications for the NetVanta 7100?

Business locations with 50 stations or less. The standalone SMB that wants high-speed Internet and voice is ideal. Additional target applications include teleworker/home office solutions and small branch office connectivity.

6 What are ADTRAN's advantages in the market?

ADTRAN's advantage is cost-effectiveness and the simplicity of deploying VoIP and converged voice-data networks. We are "de-mystifying" convergence by providing an all-in-one single box that incorporates everything the user needs for LAN, WAN, and PBX communications. The integrated solution eliminates the need for costly and time consuming network assessments to certify existing hardware performance in VoIP applications

7 How does the NetVanta 7100 price compare to competitors' equipment?

The NetVanta® 7100 solutions are priced 25 to 50% lower than competing solutions. For example, in a 24-station configuration that includes the PBX, SIP phones, voice mail, IP router, PoE switch, firewall, VPN, and CSU/DSU—ADTRAN's list price will be about \$545 per station. Competitors' prices range from \$600 to \$1,000 per station.

8 What are ADTRAN's competitive advantages?

Competitor	ADTRAN's advantages
Cisco ISR	Better value. Better channel practices.
Mitel	More extensive LAN/WAN solution. Lower cost.
3COM	Integral 24-port PoE switch, router. Lower cost
Avaya IP Office	Better value. Feature-rich router.
Nortel BCM	SIP-based. Integral switch-router.

9 Why is a single "office in a box" better than multiple pieces of special purpose equipment?

Simplicity. The ADTRAN NetVanta® 7100 offers a simple installation, ease of use, and management solution. All the features required to make a converged network run smoothly are integrated and designed to work together out of the box.

According to a recent industry report in *Light Reading*, 90% of SMBs need a network upgrade to accommodate VoIP. Network upgrades can be complex. Multi-vendor approaches require more training, cabling, interoperability testing, software programming, and different management systems. A single, all-in-one solution can significantly reduce installation time and money. The NetVanta 7100 GUI and remote management features also make ongoing M/A/Cs and support much easier and cost-efficient.

10 Will preliminary network readiness assessments be required?

Not necessarily. The ADTRAN NetVanta 7100 includes the router, PoE switch, firewall, VPN, CSU/DSU, and PBX, so you really do not need additional external equipment for small offices. It may be less expensive to simply pull out old, legacy network devices and install the NetVanta 7100, which delivers a proven solution that works without a lot of site assessments and testing.

11 Will ADTRAN sell the NetVanta 7100 in a modular fashion? For example, unbundle the firewall?

The NetVanta 7100 operates on a single integrated ADTRAN Operating System (AOS) and includes all the functions bundled together.

12 How will ADTRAN handle end user technical support calls? What about Moves/Adds/Changes (MACs)?

ADTRAN intends to direct end users to their Certified Dealer. ADTRAN offers free post-sales technical support for the NetVanta 7000 Series exclusively to Certified Dealers having successfully completed the ACSE/NetVanta 7000 Series certification training program. When contacting ADTRAN Technical Support, certified individuals must provide a current ACSE/NetVanta 7000 Series Certification ID number in order to speak to an engineer regarding the installation, maintenance, or troubleshooting of a NetVanta 7000 Series system. We also plan to redirect end users to their dealer for MAC service.

13 How will ADTRAN handle pre-sales calls from end users?

We plan to continue to provide world-class, pre-sales support, answering questions and identifying the proper ADTRAN equipment. We will then forward leads to the appropriate Certified Dealer.

14 What does "managed territory" mean? What level of sales is required?

The NetVanta® 7100 will be sold only through ADTRAN Certified IP Telephony Dealers. ADTRAN® will limit the number of Certified Dealers in any given area. Large cities will support more dealers, small cities will support fewer. ADTRAN recognizes that more is not necessarily better when it comes to the number of dealers and are planning an appropriate number of dealerships without saturating the market.

Certified Dealers will be required to achieve sales objectives to maintain their territory. Sales performance will be reviewed quarterly.

15 Is ADTRAN planning to introduce additional IP telephony products?

Yes. Additional NetVanta 7000 Series products are planned for larger enterprise networks, higher station counts, and IP telephony software applications.

16 How will ADTRAN work with service providers?

Many service providers are current ADTRAN channel partners and we will continue to support them as NetVanta 7100 partners. ADTRAN believes there are multiple entry points into this market and service providers and dealers often address different segments. ADTRAN believes certified dealers have significant opportunities to differentiate their value.

17 Is ADTRAN planning to sell NetVanta 7100 on the Internet?

No. Only ADTRAN Certified IP Telephony Dealers with direct, face-to-face selling models will sell this product.

18 What is the warranty on the NetVanta 7100?

Five years.

19 How can dealers generate service revenues with a five-year warranty?

ADTRAN's warranty is a return to factory plan. Most business customers will want faster replacements, and dealers can provide a wide range of added value services. The five-year warranty should be positioned as a benefit to the customer—an indication of industry-leading quality and credibility.

20 What is the warranty on the ADTRAN IP phone?

One year.

21 As a Certified Dealer, what do we need when we call ADTRAN's Technical Support?

Technical engineers from certified dealers should have their certification ID available. ADTRAN Technical Support will provide NetVanta 7100 support to certified technical staff only.

22 Will ADTRAN sell directly to large end users?

No. ADTRAN® Business Development Management (BDM) managers call on end users to create demand for our partners. Demand will be fulfilled by our Certified dealers.

23 What is the short, "elevator" pitch to the end user on why ADTRAN is the best choice?

ADTRAN offers quality hardware and a simple network infrastructure to support VoIP and other demanding network applications well suited for a converged voice and Internet solution. End-users may not have heard of ADTRAN, but ADTRAN is well known and respected in the telecom market with the highest reputation for service and offers the best overall value.

24 Is an installation and/or maintenance agreement required on NetVanta 7100 sales?

Yes. Dealers are required to provide installation and maintenance on all systems. This can be your own service offering or re-sell one of the ADTRAN Custom Extended Service (ACES) plans.

25 For end users who have historically engaged separate resellers for voice and data, what advantage would Certified Dealers have with the NetVanta 7100?

The NetVanta® 7100 offers an ideal situation for Certified Dealers. Since the NetVanta 7100 provides both voice and data networking in single box, you are uniquely positioned to address your customer's complete communication needs. This all-in-one solution gives you more influence on your customer. By being the single source, you can better influence the entire communications opportunity.

26 Does NetVanta 7100 have Call Detail Records available?

Yes. Call detail records can be output from the SysLog into a flat file and then imported into the dealer's software for reporting. ADTRAN has tested the Resource Software International (RSI) Call Accounting as a complementary add-on solution.

27 Can we connect multiple sites together using the NetVanta Series?

Yes. The NetVanta 7100 can be installed at the central site with NetVanta 1224 Series of integrated PoE switch-routers providing remote connectivity with central call routing and voice mail (no local call routing at the NetVanta 1224 location).

28 Does the integral Ethernet switch supply power?

Yes. One of the big advantages of the NetVanta 7100 is the integral 24-port PoE switch. It provides the maximum allowable power (15.4W) to each port and supports VoIP phones, WAPs, and IP cameras.

29 Can one of the Gigabit front-panel interfaces be used for broadband WAN access?

Yes.

30 Does the NetVanta 7100 support PRI?

Yes. Switch protocol include National ISDN, Lucent, and Nortel DMS-100.

31 Are DID trunks supported?

Yes. T1 interfaces will support DID signaling.

32 What is the maximum number of analog interfaces?

The NetVanta® 7100 includes two station and two trunk interfaces with optional four-port plug-in modules available. The maximum number of analog interfaces is ten.

33 Are SIP trunks supported between NetVanta 7100 systems?

This capability will be supported in a future release.

34 What type of trunks does the NetVanta 7100 support?

Analog (FXO), T1, and PRI.

35 Does the NetVanta 7100 support an "integrated" T1 or PRI that delivers both Internet and voice on the same circuit?

This capability is supported in the AOS 14 release of the NetVanta 7100.

36 Can two T1/PRI NIMs be installed and what is the application?

Yes. Dual T1s can be configured as 3 Mbps of MLPPP bandwidth for data applications or two separate T1s for data.

37 Can we expand the compact flash for voice mail?

Yes. The NetVanta 7100 includes 256 MB of compact flash and the socket is compatible with industry-standard compact flash cards. Third party compact flash will not be covered under the ADTRAN warranty.

38 Is the software programming for the NetVanta 7100 Series similar to the NetVanta line of switches and routers?

Yes. The NetVanta 7100 Series uses the same AOS as NetVanta switches and routers, so your previous training will apply. Your staff will only need to learn the telephony aspects of the NetVanta 7100.

39 **After our technical team has completed the certification training, is there a program available to assist us on the first few installs?**

Yes, ADTRAN® offers an economical ACES Remote Telephone Installation service. This provides the installer with a trained ADTRAN representative who has been pre-scheduled and guaranteed to be available remotely via phone at the pre-appointed date/time.

40 **Will the NetVanta 7100 work with other SIP phones?**

It depends. Certain features are vendor specific, but the basic voice services should interoperate. Check with ADTRAN for details on any specific SIP phone.

41 **Does the system support QoS?**

Yes. Both Layer 2 Class of Service and Layer 3 Quality of Service is included to help prioritize delay-sensitive traffic, such as VoIP. 802.1p VLANs, 802.1p CoS, DiffServ, Weighted Fair Queuing, Class-Based Weighted Fair Queuing, and Priority Queuing are supported.

42 **How does ADTRAN handle E-911 calls?**

The NetVanta 7100 will pass ANI to the service provider. The service provided should be interconnected to the Public Safety Answering Point (PSAP).

43 **Do we have to purchase or acquire additional software licenses?**

No additional licenses are required for adding the ADTRAN IP phones or voice mail activation.

44 **How will ADTRAN make new firmware available? Is there a cost?**

New versions of the NetVanta 7100 firmware will be available on ADTRAN's website at no charge. To generate recurring revenue, Certified Dealers can offer a fee-based service that provides the updates, implementation, and configuration services for your customers. This service can be implemented using ADTRAN's optional n-Command™.

45 **Does the NetVanta 7100 support ACD call center applications?**

The initial release includes UCD. A future release will include ACD for call center applications.

46 **Can the NIM and VIMs be installed in either slot?**

Yes.

47 **What about redundancy?**

Combining voice and data networking into a single box may be intimidating, but ADTRAN's high level of quality and reliability provide a platform you can have confidence in. Our reputation is a manufacturer whose equipment works the first time and continues to operate for years. Additional measures, such as Uninterruptible Power Supply (UPS), can provide protection against power outages. Interestingly, the mathematical probability of a single box failing is significantly lower compared to a multi-box approach. Plus, the cost savings gained from the NetVanta® 7100 Series enables you to purchase spares or a rapid replacement maintenance contract, which further reduces the risk of downtime.

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48 Does the NetVanta 7100 have Unified Messaging?

ADTRAN intends to support this in the future. The NetVanta 7100 supports email notification of a voice mail so users do not have to call to see if they have a voice mail. The NetVanta 7100 will send an email or a page alerting the user of a new voice mail.

49 Does the NetVanta 7100 support Computer Telephony Integration (CTI) for applications such as screen pops?

ADTRAN intends to support this in the future. We are currently working with a number of CTI vendors. We also anticipate that dealers will be able to write custom software and integrate with the NetVanta 7100.

50 What is the advantage of offering analog station support in an IP PBX?

Better performance for fax machines and modems. Many businesses continue to use and depend on these devices. Many competing offerings use analog telephone adapters (ATAs). The ATAs combined with the bursty nature of a packet network tend to cause poor performance, even dropouts. The NetVanta 7100 delivers a dual IP and TDM architecture so analog devices connect directly to the NetVanta 7100 via a standard FXS interface and can achieve full rate performance with the PSTN.

51 What is n-Command? How can we integrate it into our business offer?

ADTRAN's n-Command™ is an optional suite of network productivity tools for NetVanta-based networks. It offers the ability to remotely discover devices, make mass configuration changes, backup and restore device configurations, upgrade firmware to groups of devices, globally modify Access Control Lists (ACLs), and generate inventory reports for asset management. Dealers may use n-Command as a new tool for incremental services, revenues, and customer support.

52 How are system backups handled?

Backups can be made using n-Command which offers dealers an opportunity to provide regularly scheduled system backup services for customers. This dealer-provided service can add significant value by ensuring a "golden" image of the system is always available.

53 What is the wideband codec and does the NetVanta 7100 support it?

G.722 is the wideband codec and defines the algorithm for compressing 7 KHz audio into 64 KB/s channels. Typical PCM voice calls are encoded using 3.1 KHz audio for G.711. The result of increased bandwidth for the voice call (3.1 KHz to 7 KHz) is improved call quality, called "voice hi-fi". The NetVanta 7100 does not currently support G.722 (it only supports G.711 and G.729), but it may be added to the development schedule in the future.