

C2C Overview

The C2C is a streamlined desktop model in the BANDIT product family. The standard C2C chassis is available for home and business use.

1.1 Function

The C2C provides home and business IP solutions that support home services, meters, and other legacy systems that depend on analog lines and modems.

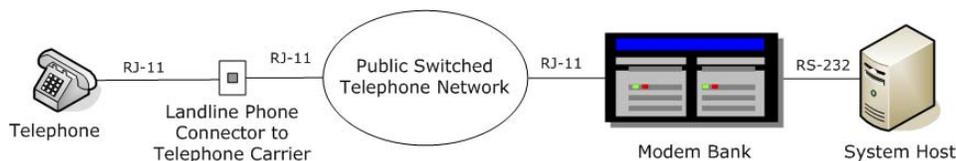
The C2C permits continuing use of analog devices and protocols. The legacy equipment remains in place, with no change in function or operation.

1.2 Scenario

Telephone landlines support analog voice calls and they support communication for several common services—for example, banking by phone.

Figure 1-1 shows a telephone plugged into a landline telephone RJ11 connector. The local telephone company digitizes the analog information and sends the call over the Public Switched Telephone Network (PSTN) to the service center host.¹

Figure 1-1. Telephone Using Landline Connection over the PSTN to Call Service Host



1.2.1 Problem

Many individuals and businesses are discontinuing use of telephone landlines because mobile telephones are portable and provide more services, for a cost comparable to a landline cost. But customers need a way to support legacy products and services.

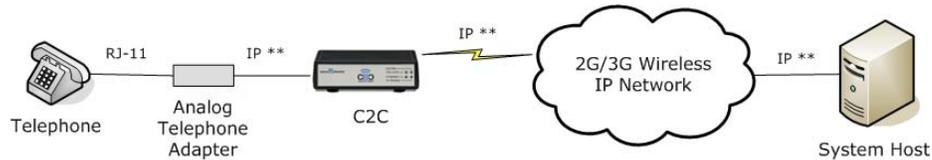
1.2.2 Solution

The solution in Figure 1-2 uses voice over IP (VOIP) to reach the service host. The telephone plugs into the RJ11 port (telephone port) on an analog telephone adapter (ATA). The ATA uses a coding protocol such as G.729 to digitize the analog voice information for the IP network.

1. Routes for PSTN connections are specified and must be configured before use. They cannot be changed without reconfiguration. If a route is unavailable, the call must travel over a previously configured back-up route.

Then the ATA uses the Session Initiation Protocol (SIP) to connect through the C2C's Ethernet port. The C2C handles the call in place of the PSTN and sends the call over the wireless IP network to the service host.²

Figure 1-2. Telephone Using C2C Wireless Connection for VOIP Call to Service Host



** IP packets can travel over wireless connections or cabled connections.

1.3 Network Support

The C2C supports 2G and 3G wireless networks. It can send IP packets over wireless and wired networks. The C2C offers enhanced performance features and supports up to 32 simultaneous VPN tunnels. The C2C's VPNs support DES, 3DES, and AES.

1.4 Features

C2C system features include user-friendly interfaces. For more information, see [C2C Chassis Hardware Description](#).

C2C security includes IP authentication, call set-up authentication, unit authentication, and user authentication. Data security utilizes IPsec and IP-based services and applications.

For compliance information, see [C2C Specifications](#).

2. IP routes are not specified; IP routing is dynamic. Each IP packet knows its destination and takes the best available route to the destination. The best route can change according to traffic volume, so one IP packet's route may differ from another IP packet's route. The C2C can send IP packets over a wireless connection or a wireline connection, or both.