

SV TEHS SIA

Development Tools for Java™

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# IPVES Application Note 12:

## Integration

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## IPJV-ES Application Note 12: Integration

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## Introduction

*IPJV-ES Development Board can be used in different applications.*

The IPJV-ES Development Board with embedded virtual machine for Java™ offers an Ethernet based connection to the Internet and numerous interface possibilities to other equipment, include serial RS-232 DTE interface, serializer module with UART, SPI, GPSI and 10BASE-T Ethernet support, 6-channel 10-bit A/D inputs, analog comparator and 16 I/O pins.

The IPJVM virtual machine for Java is a clean room implementation, that has been specially optimized to run on device with limited amount of internal memory and designed for Java™ 2 Platform, Micro Edition (J2ME™) Connected Device Configuration (CDC) Foundation Profile.

A complete development toolkit available for application development with IPJVM platform. The IPJVM platform provide system designers and software developers simple, flexible and cost-effective solution for embedded Internet application rapid development and prototyping. The platform is combination of Uvicom IP2022 Internet Processor and a Java programmable runtime environment.

The IPJV-ES Development Board based on Uvicom IP2022 Internet Processor, optimized for Internet-edge applications. It handles protocol processing in software instead of in hard-wired logic, making the whole solution more adaptable to evolving standards and allow designer to use the same solution across a wide variety of internet-edge products simply by changing the software, thereby significantly reducing nonrecurring engineering (NRE) costs.

Typical IPJV-ES applications include Includes HTTP/FTP/SMTP/SNMP/Telnet servers, PPP support on embedded UARTs, encryption, security and authentication tools, reporting and alarming via e-mail, remote monitoring, control, management and maintenance.

## Updates

New versions of the IPJV-ES software and applications can be obtained from the manufacturer's web site at:

<http://www.svtehs.com/ipjv.htm>

## Integration

*How to integrate all together.*

**T**his application show integration example of the several application. The following applications linked together: AN04: WWW server; AN05: Telnet server; AN06: IO test; AN07: IO show; AN09: FTP server; AN10: Send email. Check appropriate application datasheets for more details.

```
import jbvm.ip2k.*;
import java.text.*;
import java.util.*;
import java.io.*;
import java.net.*;
import com.decaf.*;
import com.svtehs.jftpd.*;

public class Test03
{
    public static void main (String[] aArg)
    {
        try { new VMJPinger().start(); } catch (Throwable e)
        { e.printStackTrace(System.err); }

        try { new Thread(new JBTerm(System.in,new
FileOutputStream(FileDescriptor.out))).start(); } catch (Throwable e)
        { e.printStackTrace(System.err); }

        try { new TelnetServer(); } catch (Throwable e) {
e.printStackTrace(System.err); }
```

```

    try {
    FTPdServer.main();
    } catch (Throwable e2) { e2.printStackTrace(System.err); }
    String arg[]=new String[1];
    arg[0]="/etc/wwwsrv.conf";
    try {
    WWWServer.main(arg);
        } catch (Throwable e) { System.err.println("Uncaught
exception: "+e); e.
printStackTrace(System.err); }
    }
}
class TelnetServer implements Runnable
{
    ServerSocket lSocket;
    String port ;
    Thread thread;
    public TelnetServer()
        {
            port = "23";
//Listen
            try {
                lSocket = new ServerSocket (Integer.parseInt(port));
                thread=new Thread(this);
                thread.start();
            } catch(IOException ee) { }
        }
}

```

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