

Background

This application note describes the license protection mechanism incorporated in Matrox Imaging Library (MIL) for Microsoft® Windows® CE .NET running on Matrox Iris P-Series. For the remainder of this document we will use the term MIL to designate Matrox Imaging Library (MIL) for Windows® CE .NET running on Matrox Iris P-Series.

Development Environment

The development environment for the Matrox Iris P-Series consists of the smart camera, a development PC and the necessary software development tools. Matrox Iris P-Series comes pre-installed with Microsoft® Windows® CE .NET and MIL for Windows® CE .NET run-time environment. The development of a MIL-based application for the Matrox Iris P-Series is actually done on a development PC running desktop Windows and installed with Microsoft® eMbedded Visual C++ and the MIL for Windows® CE .NET development package. The MIL for Windows® CE .NET development package installed on the PC includes a site license but requires that a temporary or run-time license be active on the Matrox Iris P-Series units. For more information about the development environment, refer to the Matrox Iris P-Series manual.

Temporary License

Users connecting to the Matrox Iris P-Series (through Microsoft® Internet Explorer) for the first time will encounter the License Agreement page (Figure 1). This license agreement must be accepted in order to activate the MIL temporary license, which will allow access to all MIL functionality for 30 days. Before accepting the license agreement, the Date, Time and Time zone settings must be properly set (Figure 2). Changing these parameters after the activation of the temporary license will result in the immediate expiration of the temporary license. The temporary license allows developers to execute MIL-based applications and remotely debug them from within Microsoft® eMbedded Visual C++ 4.0.

The temporary license is stored directly on the Matrox Iris P-Series' non-volatile memory. Changes or updates to the Matrox Iris P-Series BOOT ROM, Microsoft® Windows® CE .NET operation system, MIL library files and firmware can be performed without disrupting the temporary license. License verification is performed while the MIL-based application is running on the Matrox Iris P-Series. The number of days remaining until the temporary license expires is displayed in the Matrox Iris P-Series MIL licensing settings page (Figure 3)



Figure 1: License agreement page.

Temporary License (continued)

Set a system password & adjust date, time and time zone

Date (mm/dd/yyyy) 07 / 06 / 2004

Time (hh:mm:ss) 15 : 16 : 59

Time zone: (GMT-05:00) Eastern Time (US & Canada) ▼

Use daylight saving time:

System password

System password confirmation

Accepting the license agreement will activate the MIL temporary license. The temporary license will be valid for 30 days after activation. Please note that any subsequent changes made to the system date/time will automatically expire the license.

Figure 2: Setting the Date, Time, Time Zone and System password in the license agreement page.

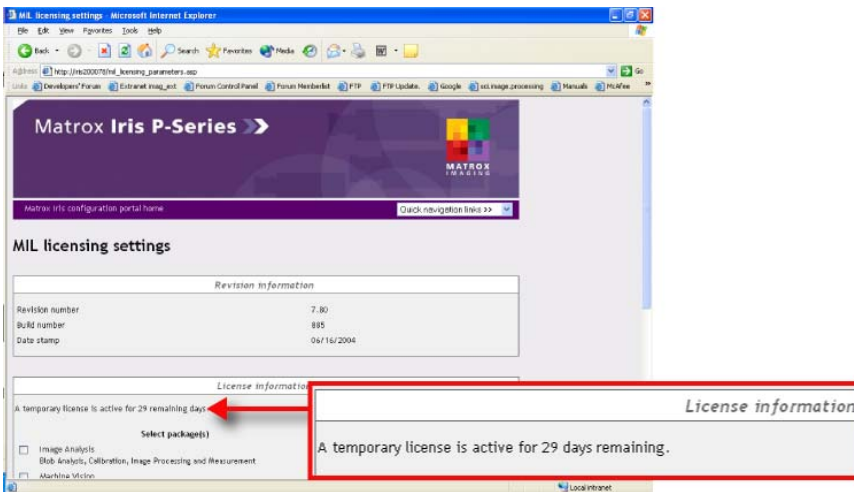


Figure 3: Temporary license expiry status.

The temporary license is tamperproof. Once the license has expired it is not possible to prolong or restart the trial period by changing the system date¹, or by reinstalling the software on the Matrox Iris P-Series. Once a temporary license has expired, the only way to continue using MIL is to purchase and activate a permanent run-time license.

Run-time License

A run-time license takes the form of a software key, which is an alphanumeric code with 80-90 characters that is obtained from Matrox. A run-time license enables one to run a MIL-based application ONLY for the package(s) (groups of modules) purchased. An error message (Figure 4) will appear in the Telnet client and MIL will cease to function if one tries to run a MIL-based application with an unlicensed package.

Run-time License (continued)

To obtain a run-time software key, a user will need to access the MIL license settings page (Figure 5). In the MIL license settings, a user selects which package to license for run-time. Clicking on 'Generate' will produce the lock code necessary to obtain the software license key from Matrox. This license key is then manually entered into MIL license settings on the Matrox Iris P-Series. The license key should be recorded along with the lock code and put in a safe place for future reference. A package can be added to an existing run-time license by accessing the MIL license settings and selecting the additional package to license. Clicking on 'Generate' will produce a new lock code that is necessary to obtain a revised license key for the additional package(s) from Matrox. The run-time license key is stored in non-volatile memory directly on the Matrox Iris P-Series. This means that in the event that the operating system requires reinstallation, the update will not affect the validity of the license key.

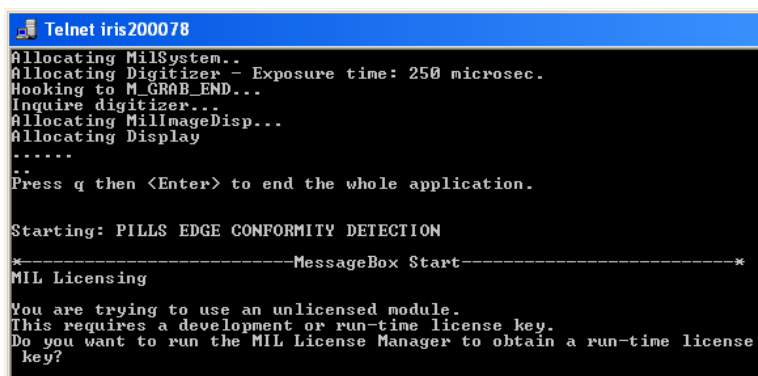


Figure 4: License error message.

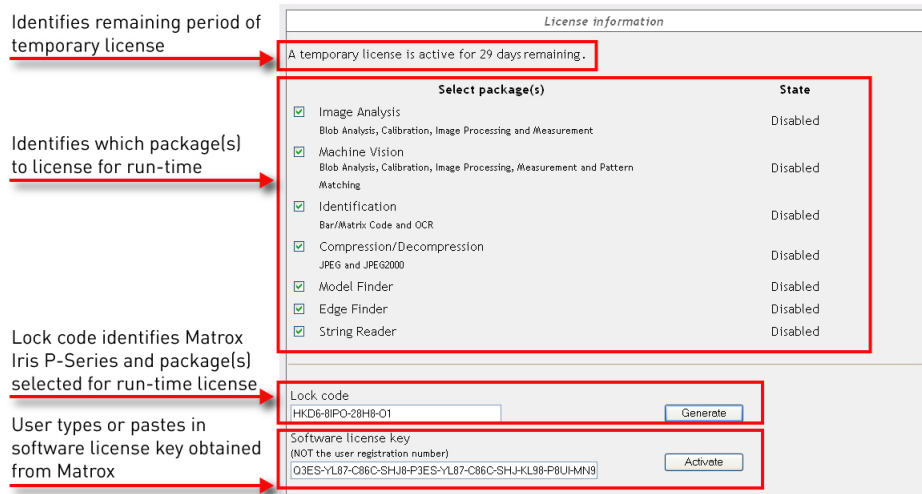


Figure 5: MIL Licensing settings used to select desired packages (groups of modules), generate lock code and to enter the license key obtained from Matrox.

ENDNOTE:

1. The temporary license can accommodate the change into or out of daylight saving time by selecting the optional checkbox in the Time/Date settings page.

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