

Intel® Trace Analyzer and Collector for Windows* OS Getting Started Guide

Overview

To simplify the use of the Intel® Trace Analyzer and Collector, a set of environmental scripts is provided to you. Source/execute the appropriate script (`<installdir>\bin\itacvars.bat`, `<installdir>/bin/itacvars.csh`, `<installdir>/bin/itacvars.sh`) in your shell before using the software.

```
$ <installdir>\bin\itacvars.bat
```

The typical use of the Trace Analyzer and Collector is as follows:

- Let your application run together with the Trace Collector to generate one (or more) trace file(s).
- Start the Trace Analyzer and to load the generated trace for analysis.

Generating a Trace File

Generating a trace file from an MPI application can be as simple as running application with `pin`. Assume you start your application with the following command:

```
> mpiexec -n 4 myApp
```

Then generating a trace can be accomplished by adding:

```
> mpiexec -n 4 itcpin --run -- myApp
```

This will create trace files named `myApp.stf*` containing trace information for all MPI call issued by the application.

If your application is statically linked against the Intel® MPI Library you have to re-link your binary like this:

```
> mpiicc -trace <all our object files> -o myApp # when using  
the Intel® C++ Compiler
```

or

```
> mpiifort -trace <all our object files> -o myApp # when using  
the Intel® Fortran Compiler
```

Normal execution of your application:

```
> mpiexec -n 4 myApp
```

will then create the trace files named `myApp.stf*`.

Analyzing a Trace File

To analyze the generated trace, invoke the graphical user interface:

```
> traceanalyzer myApp.stf
```

Read section For the Impatient in the [Trace Analyzer Reference Guide](#) get guidance on the first steps with this tool.

Further options

This document gives only a short introduction to the Trace Analyzer and Collector. For more features and details see the product documentation:

Refer to the [Intel Trace Collector Reference Guide](#) to learn more about the Trace Collector's features like its API for source code instrumentation, compiler-guided instrumentation, instrumentation of binary executables, runtime configuration and a lot more .

Refer to Intel Trace Analyzer Reference Guide to learn more about the Trace Analyzers capabilities to display, aggregate, filter, tag and compare trace data.

Disclaimer and Legal Information

INFORMATION IN THIS DOCUMENT IS PROVIDED IN CONNECTION WITH INTEL® PRODUCTS. NO LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE, TO ANY INTELLECTUAL PROPERTY RIGHTS IS GRANTED BY THIS DOCUMENT. EXCEPT AS PROVIDED IN INTEL'S TERMS AND CONDITIONS OF SALE FOR SUCH PRODUCTS, INTEL ASSUMES NO LIABILITY WHATSOEVER, AND INTEL DISCLAIMS ANY EXPRESS OR IMPLIED WARRANTY, RELATING TO SALE AND/OR USE OF INTEL PRODUCTS INCLUDING LIABILITY OR WARRANTIES RELATING TO FITNESS FOR A PARTICULAR PURPOSE, MERCHANTABILITY, OR INFRINGEMENT OF ANY PATENT, COPYRIGHT OR OTHER INTELLECTUAL PROPERTY RIGHT.

UNLESS OTHERWISE AGREED IN WRITING BY INTEL, THE INTEL PRODUCTS ARE NOT DESIGNED NOR INTENDED FOR ANY APPLICATION IN WHICH THE FAILURE OF THE INTEL PRODUCT COULD CREATE A SITUATION WHERE PERSONAL INJURY OR DEATH MAY OCCUR.

Intel may make changes to specifications and product descriptions at any time, without notice. Designers must not rely on the absence or characteristics of any features or instructions marked "reserved" or "undefined." Intel reserves these for future definition and shall have no responsibility whatsoever for conflicts or incompatibilities arising from future changes to them. The information here is subject to change without notice. Do not finalize a design with this information.

The products described in this document may contain design defects or errors known as errata which may cause the product to deviate from published specifications. Current characterized errata are available on request.

Contact your local Intel sales office or your distributor to obtain the latest specifications and before placing your product order.

Copies of documents which have an order number and are referenced in this document, or other Intel literature, may be obtained by calling 1-800-548-4725, or by visiting [Intel's Web Site](#).

BunnyPeople, Celeron, Celeron Inside, Centrino, Centrino logo, Core Inside, FlashFile, i960, InstantIP, Intel, Intel logo, Intel386, Intel486, Intel740, IntelDX2, IntelDX4, IntelSX2, Intel Core, Intel Inside, Intel Inside logo, Intel. Leap ahead., Intel. Leap ahead. logo, Intel NetBurst, Intel NetMerge, Intel NetStructure, Intel SingleDriver, Intel SpeedStep, Intel StrataFlash, Intel Viiv, Intel vPro, Intel XScale, IPLink, Itanium, Itanium Inside, MCS, MMX, Oplus, OverDrive, PDCharm, Pentium, Pentium Inside, skool, Sound Mark, The Journey Inside, VTune, Xeon, and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

* Other names and brands may be claimed as the property of others.

Copyright (©) 2008, Intel Corporation. All rights reserved.