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Debugging with UDB 1.5 User's Guide and Reference Manual

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Abstract: This report is the primary user documentation for the UDB source-level debugger for Unicon and Icon. UDB is written in Unicon and uses the execution monitoring facilities. It combines a traditional debugging interface with many novel features. By design, most of UDB's commands resemble those of GDB. UDB's underlying event-driven architecture empowers UDB with advanced debugging techniques such as 1) more powerful watchpoints, 2) tracepoints based on suspicious execution behaviors, and 3) an outstanding extensibility provided by the IDEA architecture. Experienced users may write their own custom debugging agents, test them as standalone programs, and use them on the fly during UDB debugging sessions or incorporate them into UDB's source code as permanent features. UDB is still under active development; this report is preliminary but reflects the current implementation in the Unicon language distribution.