Claims:

1. A method implemented by one or more computer systems, including:

identifying a functional module of a control flow application that specifies control flow among ~~with one or more~~ functional modules, with the control flow specifying an order in which the functional modules are executed, with the identified functional module specifying one or more controlled applications, and with the identified functional module including a method, which when executed, launches the one or more controlled applications specified by the identified functional module;

inserting, into a visual program that includes one or more graphical program elements representing the ~~one or more~~ functional modules, a breakpoint indicator specifying a position in the control flow application at which execution of the control flow application is to be interrupted by inserting the breakpoint indicator into the visual program in juxtaposition to a graphical element representing the identified functional module;

wherein the position represents ~~a given transition, which includes~~ a transition to a state in which contents of the identified functional module represented by the graphical program element are executed, a transition from the identified functional module represented by the graphical program element, or a transition to the identified functional module represented by the graphical program element;

executing the control flow application in an execution environment, including:

if the position represents the ~~given~~ transition from the identified functional module represented by the graphical program element,

executing the method of the identified functional module; and

responsive to executing the method, launching the one or more controlled applications specified by the identified functional module~~.~~; and

at a position corresponding to the breakpoint indicator,

interrupting execution of executable control flow application; and

determining one or more attributes of the execution environment in which the identified functional module of the control flow application is being executed.

2. The computer-implemented method of claim 1, wherein the control flow application is represented as a plurality of hierarchical levels, with the control flow application itself being represented in a first one of the hierarchical levels, and with each functional module being represented in a second one of the hierarchical levels that is distinct from the first one of the hierarchical levels that includes the control flow application.

3. The computer-implemented method of claim 2, wherein a functional module is configured to perform methods that perform the one or more actions of the functional module, wherein each of the methods configured to be performed is represented in a third one of the hierarchical levels that differs from each of the first one of the hierarchical levels and the second one of the hierarchical levels.

4. The computer-implemented method of claim 3, wherein the specified position is a first specified position, wherein the control flow application includes transitions among the methods configured to be performed, and wherein the method further includes:

configuring the control flow application to interrupt execution of the control flow application at a second specified position that represents a transition to a given method of the functional module, before execution of contents of the given method or a transition from the given method; and

at a point of execution representing the second specified position,

interrupting execution of the control flow application and providing data representing one or more attributes of a runtime environment in which the given method is executed.

5. The computer-implemented method of claim 4, wherein an attribute of the given method includes a local environment of a system executing the given method.

6. The computer-implemented method of claim 1, wherein a first computer system executes the control flow application, wherein a second computer system executes a spawned process of a given functional module, wherein the first computer system differs from the second computer system, and wherein the method further includes:

responsive to the interrupting, causing display of a user interface that renders one or more visual representations of one or more attributes of a runtime environment of the second computer system.

7. A data processing system, including:

one or more processing devices; and

one or more machine-readable hardware storage devices storing instructions that are executable by the one or more processing devices to perform operations including:

identifying a functional module of a control flow application that specifies control flow among ~~with one or more~~ functional modules, with the control flow specifying an order in which the functional modules are executed, with the identified functional module specifying one or more controlled applications, and with the identified functional module including a method, which when executed, launches the one or more controlled applications specified by the identified functional module;

inserting, into a visual program that includes one or more graphical program elements representing the ~~one or more~~ functional modules, a breakpoint indicator specifying a position in the control flow application at which execution of the control flow application is to be interrupted by inserting the breakpoint indicator into the visual program in juxtaposition to a graphical element representing the identified functional module;

wherein the position represents ~~a given transition, which includes~~ a transition to a state in which contents of the identified functional module represented by the graphical program element are executed, a transition from the identified functional module represented by the graphical program element, or a transition to the identified functional module represented by the graphical program element;

executing the control flow application in an execution environment, including:

if the position represents the ~~given~~ transition from the identified functional module represented by the graphical program element,

executing the method of the identified functional module; and

responsive to executing the method, launching the one or more controlled applications specified by the identified functional module~~;~~ and at a position corresponding to the breakpoint indicator,

interrupting execution of executable control flow application; and

determining one or more attributes of the execution environment in which the identified functional module of the control flow application is being executed.

8. The data processing system of claim 7, wherein the control flow application is represented as a plurality of hierarchical levels, with the control flow application itself being represented in a first one of the hierarchical levels, and with each functional module being represented in a second one of the hierarchical levels that is distinct from the first one of the hierarchical levels that includes the control flow application.

9. The data processing system of claim 8, wherein a functional module is configured to perform methods that perform the one or more actions of the functional module, wherein each of the methods configured to be performed is represented in a third one of the hierarchical levels that differs from each of the first one of the hierarchical levels and the second one of the hierarchical levels.

10. The data processing system of claim 9, wherein the specified position is a first specified position, wherein the control flow application includes transitions among the methods configured to be performed, and wherein the one or more operations further include:

configuring the control flow application to interrupt execution of the control flow application at a second specified position that represents a transition to a given method of the functional module, before execution of contents of the given method or a transition from the given method; and

at a point of execution representing the second specified position,

interrupting execution of the control flow application and providing data representing one or more attributes of a runtime environment in which the given method is executed.

11. The data processing system of claim 10, wherein an attribute of the given method includes a local environment of a system executing the given method.

12. The data processing system of claim 7, wherein a first computer system executes the control flow application, wherein a second computer system executes a spawned process of a given functional module, wherein the first computer system differs from the second computer system, and wherein the method further includes:

responsive to the interrupting, causing display of a user interface that renders one or more visual representations of one or more attributes of a runtime environment of the second computer system.

13. One or more machine-readable hardware storage devices storing instructions that are executable by one or more processing devices to perform operations including:

identifying a functional module of a control flow application that specifies control flow among~~with one or more~~ functional modules, with the control flow specifying an order in which the functional modules are executed, with the identified functional module specifying one or more controlled applications, and with the identified functional module including a method, which when executed, launches the one or more controlled applications specified by the identified functional module;

inserting, into a visual program that includes one or more graphical program elements representing the ~~one or more~~ functional modules, a breakpoint indicator specifying a position in the control flow application at which execution of the control flow application is to be interrupted by inserting the breakpoint indicator into the visual program in juxtaposition to a graphical element representing the identified functional module;

wherein the position represents ~~a given transition, which includes~~ a transition to a state in which contents of the identified functional module represented by the graphical program

element are executed, a transition from the identified functional module represented by the graphical program element, or a transition to the identified functional module represented by the graphical program element;

executing the control flow application in an execution environment, including:

if the position represents the ~~given~~ transition from the identified functional module represented by the graphical program element,

executing the method of the identified functional module; and

responsive to executing the method, launching the one or more controlled applications specified by the identified functional module;~~,~~ and

at a position corresponding to the breakpoint indicator,

interrupting execution of executable control flow application; and

determining one or more attributes of the execution environment in which the identified functional module of the control flow application is being executed.

14. The one or more machine-readable hardware storage devices of claim 13, wherein the control flow application is represented as a plurality of hierarchical levels, with the control flow application itself being represented in a first one of the hierarchical levels, and with each functional module being represented in a second one of the hierarchical levels that is distinct from the first one of the hierarchical levels that includes the control flow application.

15. The one or more machine-readable hardware storage devices of claim 14, wherein a functional module is configured to perform methods that perform the one or more actions of the functional module, wherein each of the methods configured to be performed is represented in a third one of the hierarchical levels that differs from each of the first one of the hierarchical levels and the second one of the hierarchical levels.

16. The one or more machine-readable hardware storage devices of claim 15, wherein the specified position is a first specified position, wherein the control flow application includes

transitions among the methods configured to be performed, and wherein the one or more operations further include:

configuring the control flow application to interrupt execution of the control flow application at a second specified position that represents a transition to a given method of the functional module, before execution of contents of the given method or a transition from the given method; and

at a point of execution representing the second specified position,

interrupting execution of the control flow application and providing data representing one or more attributes of a runtime environment in which the given method is executed.

17. The one or more machine-readable hardware storage devices of claim 16, wherein an attribute of the given method includes a local environment of a system executing the given method.

18. The one or more machine-readable hardware storage devices of claim 17, wherein a first computer system executes the control flow application, wherein a second computer system executes a spawned process of a given functional module, wherein the first computer system differs from the second computer system, and wherein the method further includes:

responsive to the interrupting, causing display of a user interface that renders one or more visual representations of one or more attributes of a runtime environment of the second computer system.