CLAIMS

1. A computer program product for facilitating processing in a computing environment, said computer program product comprising:

a computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing a method comprising:

providing by a first program to a second program an indication of a warning track facility installed within the computing environment, the warning track facility to provide to the second program a grace period to perform a first function;

notifying the second program, by the first program, that the grace period has begun; and

performing by the first program a second function subsequent to the grace period.

2. The computer program product of claim 1, wherein the performing the second function comprises providing by the first program to the second program a status indication relating to completion of the first function within the grace period.

3. The computer program product of claim 2, wherein the providing the status indication comprises providing by the first program to the second program, a next time the second program executes, an indication that the first function completed within the grace period.

4. The computer program product of claim 2, wherein the providing the status indication comprises providing by the first program to the second program, a next time the second program executes, an indication that the first function did not complete within the grace period.

5. The computer program product of claim 1, wherein the method further comprises receiving by the first program a warning track registration request from the second program, and enabling the second program to participate in the warning track facility.

6. The computer program product of claim 1, wherein the first program is a host program and the second program is a guest program, the guest program having access to shared resources of the computing environment during a timeslice provided to a guest central processing unit on which the guest program executes, the grace period being distinguishable from the timeslice.

7. The computer program product of claim 6, wherein the grace period prematurely terminates the timeslice.

8. The computer program product of claim 6, wherein the grace period provides a period in addition to the timeslice in which to perform the first function.

9. The computer program product of claim 1, wherein the first function comprises one of:

completing a dispatchable unit executing on a processor in which the second program executes; or

making the dispatchable unit re-dispatchable on another processor of the computing environment.

10. The computer program product of claim 1, wherein the notifying comprises causing an interrupt in which shared resources assigned to the second program are released subsequent to termination of the grace period.

11. A computer system for facilitating processing in a computing environment, said computer system comprising:

a memory; and

a processor in communications with the memory, wherein the computer system is configured to perform a method, said method comprising:

providing by a first program to a second program an indication of a warning track facility installed within the computing environment, the warning track facility to provide to the second program a grace period to perform a first function;

notifying the second program, by the first program, that the grace period has begun; and

performing by the first program a second function subsequent to the grace period.

12. The computer system of claim 11, wherein the performing the second function comprises providing by the first program to the second program a status indication relating to completion of the first function within the grace period.

13. The computer system of claim 11, wherein the method further comprises receiving by the first program a warning track registration request from the second program, and enabling the second program to participate in the warning track facility.

14. The computer system of claim 11, wherein the first program is a host program and the second program is a guest program, the guest program having access to shared resources of the computing environment during a timeslice provided to a guest central processing unit on which the guest program executes, the grace period being distinguishable from the timeslice.

15. The computer system of claim 14, wherein the grace period prematurely terminates the timeslice.

16. The computer system of claim 14, wherein the grace period provides a period in addition to the timeslice in which to perform the first function.

17. The computer system of claim 11, wherein the first function comprises one of:

completing a dispatchable unit executing on a processor in which the second program executes; or

making the dispatchable unit re-dispatchable on another processor of the computing environment.

18. A method of facilitating processing in a computing environment, said method comprising:

providing by a first program to a second program an indication of a warning track facility installed within the computing environment, the warning track facility to provide to the second program a grace period to perform a first function;

notifying the second program, by the first program, that the grace period has begun; and

performing by the first program a second function subsequent to the grace period.

19. The method of claim 18, further comprising receiving by the first program a warning track registration request from the second program, and enabling the second program to participate in the warning track facility.

20. The method of claim 18, wherein the first program is a host program and the second program is a guest program, the guest program having access to shared resources of the computing environment during a timeslice provided to a guest central processing unit on which the guest program executes, the grace period being distinguishable from the timeslice.

CLAIMS

1. A computer program product for facilitating processing in a computing environment, said computer program product comprising:

a non-transitory computer readable storage medium readable by a processing circuit and storing instructions for execution by the processing circuit for performing a method comprising:

providing by a first program to a second program an indication of installation of warning track facility installed within the computing environment, the indication of installation to be obtained by the second program, the warning track facility to provide to the second program a grace period to perform a first function;

obtaining, by the first program based on the providing, an unsolicited indication that the second program has registered for the warning track facility, the registration comprising an indication to the first program that the second program understands a protocol of the warning track facility and intends to participate in the warning track facility;

enabling, based on obtaining the indication that the second program has registered, the warning track facility for the second program;

notifying the second program, by the first program, that the grace period has begun; and

performing by the first program a second function subsequent to the grace period.

2. The computer program product of claim 1, wherein the performing the second function comprises providing by the first program to the second program a status indication relating to completion of the first function within the grace period.

3. The computer program product of claim 2, wherein the providing the status indication comprises providing by the first program to the second program, a next time the second program executes, an indication that the first function completed within the grace period.

4. The computer program product of claim 2, wherein the providing the status indication comprises providing by the first program to the second program, a next time the second program executes, an indication that the first function did not complete within the grace period.

5. The computer program product of claim 1, wherein the first program is a host program and the second program is a guest program, the guest program having access to shared resources

of the computing environment during a timeslice provided to a guest central processing unit on which the guest program executes, the grace period being distinguishable from the time slice.

6. The computer program product of claim 5, wherein the grace period prematurely terminates the timeslice or the grace period provides a period in addition to the timeslice in which to perform the first function.

7. The computer program product of claim 1, wherein the first function comprises one of:

completing a dispatchable unit executing on a processor in which the second program executes; or

making the dispatchable unit re-dispatchable on another processor of the computing environment.

8. The computer program product of claim 1, wherein the notifying comprises causing an interrupt in which shared resources assigned to the second program are released subsequent to termination of the grace period.

9. The computer program product of claim 1, wherein registration is performed via a Diagnose instruction, the Diagnose instruction comprising a register parameter to signal that the second program understands a warning track interruption of the warning track facility.

10. The computer program product of claim 1, wherein the grace period is distinguishable from a timeslice provided to a processor on which the second program executes, the second program having access to shared resources of the computing environment during the timeslice, and wherein the grace period provides a period in addition to the timeslice, wherein any portion of the period used by the second program to perform the first function is charged against a next timeslice for the second program.

11. The computer program product of claim 1, wherein the method further comprises:

determining whether the second program voluntarily exited prior to expiration of the grace period;

based on determining the second program voluntarily exited prior to expiration of the grace period, providing to the second program, a next time the second program executes, positive feedback indicating voluntarily exiting prior to expiration of the grace period; and

based on determining the second program is tardy on voluntarily exiting prior to expiration of the grace period, providing to the second program, a next time the second program executes, an exception feedback indication indicating tardiness in voluntarily exiting.

12. The computer program product of claim 1, wherein the method further comprises:

determining, based on a timer interruption condition of a first program timer or a warning track intervention request, whether a grace period active control indicator is set;

based on the grace period active control indicator not being set, setting the grace period active control indicator;

saving a current value of the first program timer as a saved value;

setting the first program timer to the grace period;

determining whether the second program is enabled for the warning track facility; and

based on determining the second program is enabled, notifying the second program that the grace period has begun.

13. A computer system for facilitating processing in a computing environment, said computer system comprising:

a memory; and

a processor in communications with the memory, wherein the computer system is configured to perform a method, said method comprising:

providing by a first program to a second program an indication of installation of a warning track facility installed within the computing environment, the indication of installation to be obtained by the second program, the warning track facility to provide to the second program a grace period to perform a first function;

obtaining, by the first program based on the providing, an unsolicited indication that the second program has registered for the warning track facility, the registration comprising an indication to the first program that the second program understands a protocol of the warning track facility and intends to participate in the warning track facility;

enabling, based on obtaining the indication that the second program has registered, the warning track facility for the second program;

notifying the second program, by the first program, that the grace period has begun; and

performing by the first program a second function subsequent to the grace period.

14. The computer system of claim 13, wherein the performing the second function comprises providing by the first program to the second program a status indication relating to completion of the first function within the grace period.

15. The computer system of claim 13, wherein the first program is a host program and the second program is a guest program, the guest program having access to shared resources of the computing environment during a timeslice provided to a guest central processing unit on which the guest program executes, the grace period being distinguishable from the timeslice.

16. The computer system of claim 15, wherein the grace period prematurely terminates the timeslice or the grace period provides a period in addition to the timeslice in which to perform the first function.

17. The computer system of claim 13, wherein the first function comprises one of:

completing a dispatchable unit executing on a processor in which the second program executes; or

making the dispatchable unit re-dispatchable on another processor of the computing environment.

18. The computer system of claim 13,wherein the grace period is distinguishable from a timeslice provide to a processor on which the second program executes, the second program having access to shared resources of the computing environment during the timeslice, and wherein the grace period provides a period in addition to the timeslice, wherein any portion of the period used by the second program to perform the first function is charged against a next timeslice for the second program.

19. The computer system of claim 13, wherein the method further comprises:

determining whether the second program voluntarily exited prior to expiration of the grace period;

based on determining the second program voluntarily exited prior to expiration of the grace period, providing to the second program, a next time the second program executes, positive feedback indicating voluntarily exiting prior to expiration of the grace period; and

based on determining the second program is tardy on voluntarily exiting prior to expiration of the grace period, providing to the second program, a next time the second program executes, an exception feedback indication indicating tardiness in voluntarily exiting.

20. The computer system of claim 13, wherein the method further comprises:

determining, based on a timer interruption condition of a first program timer or a warning track intervention request, whether a grace period active control indicator is set;

based on the grace period active control indicator not being set, setting the grace period active control indicator;

saving a current value of the first program timer as a saved value;

setting the first program timer to the grace period;

determining whether the second program is enabled for the warning track facility; and

based on determining the second program is enabled, notifying the second program that the grace period has begun.