WHAT IS CLAIMED IS:

1. A system, comprising:

a plurality of instance hosts configurable to implement resource instances of a network-accessible service; and

one or more control servers configured to manage configuration of resource instances at the plurality of instance hosts;

wherein a selected control server of the one or more control servers is configured to transmit, in response to an instance configuration request from a client, a sequence of one or more commands to a selected instance host of the plurality of instance hosts;

wherein the selected instance host is configured to, in response to receiving the sequence of one or more commands, instantiate a remote command executor;

wherein the remote command executor is configured to initiate one or more configuration operations corresponding to the sequence of one or more commands; and

wherein the selected control server is configured to provide a response to the instance configuration request, based at least in part on results of the one or more configuration operations, to the client.

2. The system as recited in claim 1, wherein the selected instance host is further configured to:

receive the sequence of one or more commands at a web server; and

wherein the web server is configured to instantiate the remote command executor in accordance with the Common Gateway Interface (CGI) standard.

3. The system as recited in claim 1, wherein the selected instance host comprises an event dispatcher configured to:

subscribe to an event monitor implemented at the selected instance host; and

transmit, via a secure networking protocol, to a particular control server of the one or more control servers, a notification of an occurrence of an event indicated by the event monitor at the selected instance host.

4. The system as recited in claim 3, wherein the particular control server is further configured to:

update, based at least in part on the notification, state information for a resource instance.

5. The system as recited in claim 1, wherein the one or more control servers comprise a plurality of control servers of a control server pool, wherein a size of the control server pool is determined based at least in part on an estimated rate at which instance recovery configuration operations are to be performed to recover, in the event of a particular type of failure, resource instances implemented at the plurality of instance hosts.

6. The system as recited in claim 1, wherein the selected instance host is located within a first data center of a first availability container of a provider network, and wherein the selected control server is located within a different data center within a second availability container of the provider network, wherein the first availability container has a differ availability profile than the second availability container.

7. The system as recited in claim 1, wherein prior to transmitting the sequence of one or more commands, the selected control server is configured to obtain a lock on the selected instance host.

8. The system as recited in claim 1, wherein the sequence of one or more commands is transmitted in accordance with a command protocol supporting a plurality of command types, wherein at least a subset of command types of the plurality of command types comprise idempotent commands.

9. The system as recited in claim 8, wherein a particular control server of the one or more control servers is further configured to:

collect one or more performance metrics from the selected instance host using a particular command type of the plurality of command types.

10. The system as recited in claim 6, wherein the selected instance host is chosen from the plurality of instance hosts based at least in part on one or more of: (a) identification information of the client (b) a resource instance type indicated in the instance configuration request (c) one or more performance metrics associated with the plurality of instance hosts, or (d) one or more pricing policies.

11. A method, comprising:

in response to an instance configuration request from a client, wherein the instance configuration request is directed to a particular service of one or more network-accessible services,

transmitting, by a control server to a selected instance host of a plurality of instance hosts, one or more commands;

receiving, from the selected instance host, results of one or more configuration operations initiated at the selected instance host by a remote command executor instantiated at the selected instance host in response to the one or more commands;

providing a response to the instance configuration request, based at least in part on results of the one or more configuration operations, to the client.

12. The method of claim 11, wherein the control server comprises one or more of: (a) a workflow manager configured to determine the one or more commands to be transmitted, (b) a communication module configured to transmit the one or more commands to the selected instance host, and (c) an event listener configured to receive asynchronous event notifications from the selected instance host.

13. The method of claim 11, wherein prior to transmitting the one or more commands, the control server is configured to obtain a lock on the selected instance host.

14. The method of claim 11, further comprising:

collecting one or more performance metrics from the selected instance host using a particular command type of a plurality of command types.

15. The method of claim 11, wherein the one or more commands is transmitted via a variant of the HyperText Transfer Protocol.

WHAT IS CLAIMED IS:

1. A method, comprising:

in response to an instance configuration request from a client,

receiving, from a selected control server of one or more control servers designated to manage remote configuration of resource instances, a sequence of one or more commands formatted according to a particular command protocol for instance configuration, wherein said receiving is performed at a selected instance host of a plurality of instance hosts designated to implement resource instances of a network-accessible service;

instantiating, at the selected instance host in response to receiving the sequence of one or more commands, a remote command executor;

initiating, by the remote command executor at the selected instance host, one or more configuration operations corresponding to the sequence of one or more commands;

providing results of the one or more configuration operations to the selected control server;

terminating the remote command executor; and

providing a response to the instance configuration request, based at least in part on the results, to the client.

2. The method as recited in claim 1, further comprising:

receiving, via a secure networking protocol, the sequence of one or more commands by a web server, on the selected instance host;

wherein said instantiating the remote command executor comprises instantiating at least one thread of execution by the web server in accordance with the Common Gateway Interface (CGI) standard.

3. The method as recited in claim 1, further comprising:

subscribing, by an event dispatcher at the selected instance host, to an event monitor implemented at the selected instance host;

transmitting, to a particular control server of the set of control servers, from the event dispatcher via a secure networking protocol, a notification of an event at a resource instance implemented at the selected instance host, wherein said notification is usable to update state information of the resource instance.

4. The method as recited in claim 1, further comprising:

estimating a rate at which instance recovery configuration operations are to be performed to recover, in the event of a particular type of failure, resource instances implemented at the plurality of instance hosts; and

determining a number of control servers to be included in the one or more control servers based at least in part on the estimated rate.

5. The method as recited in claim 1, wherein the selected instance host is located within a first data center of a first availability container of a provider network, and wherein the selected control server is located within a different data center within a second availability container of the provider network, wherein the first availability container has a different availability profile than the second availability container.

6. A system, comprising:

a plurality of instance hosts configurable to implement resource instances of a network-accessible service; and

one or more control servers configured to manage configuration of resource instances at the plurality of instance hosts;

wherein a selected control server of the one or more control servers is configured to transmit, in response to an instance configuration request from a client, a sequence of one or more commands to a selected instance host of the plurality of instance hosts;

wherein the selected instance host is configured to, in response to receiving the sequence of one or more commands, instantiate a remote command executor;

wherein the remote command executor is configured to initiate one or more configuration operations corresponding to the sequence of one or more commands; and

wherein the selected control server is configured to provide a response to the instance configuration request, based at least in part on results of the one or more configuration operations, to the client.

7. The system as recited in claim 6, wherein the selected instance host is further configured to:

receive the sequence of one or more commands at a web server; and

wherein the web server is configured to instantiate the remote command executor in accordance with the Common Gateway Interface (CGI) standard.

8. The system as recited in claim 6, wherein the selected instance host comprises an event dispatcher configured to:

subscribe to an event monitor implemented at the selected instance host; and

transmit, via a secure networking protocol, to a particular control server of the one or more control servers, a notification of an occurrence of an event indicated by the event monitor at the selected instance host.

9. The system as recited in claim 8, wherein the particular control server is further configured to:

update, based at least in part on the notification, state information for a resource instance.

10. The system as recited in claim 6, wherein the one or more control servers comprise a plurality of control servers of a control server pool, wherein a size of the control server pool is determined based at least in part on an estimated rate at which instance recovery configuration operations are to be performed to recover, in the event of a particular type of failure, resource instances implemented at the plurality of instance hosts.

11. The system as recited in claim 6, wherein the selected instance host is located within a first data center of a first availability container of a provider network, and wherein the selected control server is located within a different data center within a second availability container of the provider network, wherein the first availability container has a differ availability profile than the second availability container.

12. The system as recited in claim 6, wherein prior to transmitting the sequence of one or more commands, the selected control server is configured to obtain a lock on the selected instance host.

13. The system as recited in claim 6, wherein the sequence of one or more commands is transmitted in accordance with a command protocol supporting a plurality of command types, wherein at least a subset of command types of the plurality of command types comprise idempotent commands.

14. The system as recited in claim 13, wherein a particular control server of the one or more control servers is further configured to:

collect one or more performance metrics from the selected instance host using a particular command type of the plurality of command types.

15. The system as recited in claim 6, wherein the selected instance host is chosen from the plurality of instance hosts based at least in part on one or more of: (a) identification information of the client (b) a resource instance type indicated in the instance configuration request (c) one or more performance metrics associated with the plurality of instance hosts, or (d) one or more pricing policies.

16. The system as recited in claim 6, wherein the sequence of one or more commands is transmitted via a variant of the HyperText Transfer Protocol.

17. The system as recited in claim 6, wherein the sequence of one or more commands is transmitted in accordance with a variant of JavaScript Object Notation (JSON) format.

18. The system as recited in claim 6, wherein the instance configuration request indicates a resource instance type to be configured, wherein the resource instance type comprises at least one of: (a) a compute resource instance, (b) a storage resource instance, or (c) a networking resource instance.

19. A non-transitory computer-accessible storage medium storing program instructions that when executed on one or more processors implement a control server of a provider network comprising a plurality of instance hosts configurable to host resource instances of one or more network-accessible services, wherein the control server is configured to:

in response to an instance configuration request from a client, wherein the instance configuration request is directed to a particular service of the one or more network-accessible services,

transmit, to a selected instance host of the plurality of instance hosts, one or more commands;

receive, from the selected instance host, results of one or more configuration operations initiated at the selected instance host by a remote command executor instantiated at the selected instance host in response to the one or more commands;

provide a response to the instance configuration request, based at least in part on results of the one or more configuration operations, to the client.

20. The non-transitory computer-accessible storage medium as recited in claim 19, wherein the control server comprises one or more of: (a) a workflow manager configured to determine the one or more commands to be transmitted, (b) a communication module configured to transmit the one or more commands to the selected instance host, and (c) an event listener configured to receive asynchronous event notifications from the selected instance host.

21. The non-transitory computer-accessible storage medium as recited in claim 19, wherein prior to transmitting the one or more commands, the control server is configured to obtain a lock on the selected instance host.

22. The non-transitory computer-accessible storage medium as recited in claim 19, wherein the one or more commands are transmitted in accordance with a command protocol supporting a plurality of command types, wherein at least a subset of command types of the plurality of command types comprise idempotent commands.

23. The non-transitory computer-accessible storage medium as recited in claim 22, wherein the control server is further configured to:

collect one or more performance metrics from the selected instance host using a particular command type of the plurality of command types.

24. The non-transitory computer-accessible storage medium as recited in claim 19, wherein the one or more commands is transmitted via a variant of the HyperText Transfer Protocol.

25. The non-transitory computer-accessible storage medium as recited in claim 19, wherein the particular network-accessible service defines a set of resource instance types, wherein the instance configuration request comprises an indication of (a) a particular resource instance type of the set and (b) a requested variation to a default property of the particular resource instance type, and wherein at least one command of the one or more commands is targeted to implement the requested variation.

26. The non-transitory computer-accessible storage medium as recited in claim 19, wherein the requested variation comprises an indication of at least one of: (a) a performance capability, or (b) an installed software component.

27. A non-transitory computer-accessible storage medium storing program instructions that when executed on one or more processors:

receive an instance configuration command from a control server of a provider network, wherein the control server is configured to manage remote configuration of resource instances to provide one or more network-accessible services;

instantiate a remote command executor in response to the instance configuration command, wherein the remote command executor is configured to initiate one or more configuration operations in accordance with the command; and

provide results of the one or more configuration operations to the control server.

28. The non-transitory computer-accessible storage medium as recited in claim 27, wherein the instructions when executed on the one or more processors:

receive the instance configuration command at a web server, wherein the remote command executor comprises at least one executable process instantiated in accordance with the Common Gateway Interface (CGI) standard, and wherein the at least one executable process is configured to terminate after initiation of the one or more configuration operations.

29. The non-transitory computer-accessible storage medium as recited in claim 27, wherein the instructions when executed on the one or more processors implement an event dispatcher operable to:

subscribe to an event monitor implemented at least in part by at least one of (a) a local hypervisor component, or (b) a local operating system component; and

transmit, to the control server, a notification of an event monitored by the event monitor.

30. A system comprising:

one or more instance hosts configured to implement a plurality of resource instances that provide one or more network-accessible services, the one or more instance hosts comprising one or more processors, the one or more instance hosts further comprising:

a command receiver that executes to access one or more commands sent by a control server for remote configuration of a resource instance of the plurality of resource instances; and

at least one remote command executor (RCE) that executes to:

cause one or more operations to be performed to configure the resource instance, the one or more operations corresponding to the one or more commands; and

determine one or more results of the one or more operations;

wherein the command receiver further executes to provide the one or more results to the control server.

31. The system of claim 30, wherein the at least one RCE is instantiated by the command receiver in response to receiving the one or more commands.

32. The system of claim 30, wherein the resource instance is implemented on an instance host that is included in a same provider network as the control server.

33. The system of claim 30, wherein the resource instance is implemented on a third party instance host that is outside a provider network that includes the control server.

34. The system of claim 33, wherein the third party instance host is configured to provide test information indicating one or more tests to validate that the third party instance host supports the remote configuration of the resource instance.

35. The system of claim 30, wherein:

the command receiver comprises a web server;

the at least one RCE comprises at least one Common Gateway Interface (CGI) process that is instantiated by the command receiver; and

the one or more commands are sent using a secure version of HyperText Transfer Protocol (HTTP).

36. The system of claim 30, wherein the plurality of resource instances comprises one or more of a compute resource instance, a storage resource instance, or a network resource instance.

37. A method, comprising:

accessing, at an instance host comprising one or more hardware processors, a command sequence of one or more commands, the command sequence sent by a control server to configure a resource instance provided by the instance host;

employing at least one remote command executor (RCE) to cause one or more operations to be performed to configure the resource instance, the one or more operations corresponding to the command sequence; and

providing one or more results of the one or more operations to the control server.

38. The method of claim 37, wherein at least one of the one or more operations is idempotent.

39. The method of claim 37, wherein the command sequence is formatted according to a version of one or more of JavaScript Object Notation (JSON) or Extended Markup Language (XML).

40. The method of claim 37, wherein the command sequence is sent from the control server via a tunneling protocol.

41. The method of claim 37, wherein the one or more operations are directed to one or more of:

a hypervisor executing on the instance host that provides the resource instance; or

an operating system executing on the instance host.

42. The method of claim 37, wherein the instance host is included in a same provider network as the control server.

43. The method of claim 37, further comprising:

instantiating the at least one RCE in response to receiving the command sequence.

44. One or more non-transitory computer-readable storage media storing instructions that, when executed on one or more processors, cause the one or more processors to perform actions comprising:

accessing, at an instance host, one or more commands sent by a control server to configure a resource instance provided by the instance host;

employing at least one remote command executor (RCE) to cause one or more operations to be performed to configure the resource instance, the one or more operations corresponding to the one or more commands; and

providing one or more results of the one or more operations to the control server.

45. The one or more non-transitory computer-readable storage media of claim 44, the actions further comprising:

for each of the one or more commands, instantiating a RCE to cause the one or more operations to be performed corresponding to a command.

46. The one or more non-transitory computer-readable storage media of claim 44, wherein the instance host is outside a provider network that includes the control server.

47. The one or more non-transitory computer-readable storage media of claim 44, wherein:

causing the one or more operations to be performed comprises requesting that the one or more operations be performed by one or more of: a hypervisor executing on the instance host, or an operating system executing on the instance host; and

the one or more results comprise one or more of a return code, an error output, or a standard output provided the one or more of the hypervisor or the operating system.

48. The one or more non-transitory computer-readable storage media of claim 44, wherein the at least one RCE comprises at least one Common Gateway Interface (CGI) process that is instantiated by a web server executing on the instance host.

49. The one or more non-transitory computer-readable storage media of claim 40, wherein the one or more commands are formatted according to a version of one or more of JavaScript Object Notation (JSON) or Extended Markup Language (XML).

50. A method, comprising:

receiving, at a provider network supporting remote configuration of resources of a network-accessible service, a platform approval request comprising an indication of one or more candidate platforms for hosting virtualized resources;

performing, in response to the platform approval request, a capability determination operation on a particular candidate platform of the one or more candidate platforms;

designating, based at least in part on a result of the capability determination operation, the candidate platform as an approved platform to be used for hosting virtualized resources that are to be configured at least in part via one or more control servers of the provider network;

issuing, from a particular control server of the one or more control servers, in response to a resource request from a client, one or more configuration commands to instantiate a particular virtualized resource at the approved platform; and

providing, to the client, a reply to the resource request based at least in part on a result of an operation initiated by a remote command executor instantiated at the approved platform in response to the one or more configuration commands, wherein the remote command executor terminates after initiating the operation.

51. The method as recited in claim 50, wherein the capability determination operation comprises checking whether the candidate platform is configurable to instantiate the remote command executor.

52. The method as recited in claim 50, wherein the capability determination operation comprises checking whether the candidate platform comprises a web server configurable to instantiate the remote command executor in accordance with the Common Gateway Interface (CGI).

53. The method as recited in claim 50, wherein the network-accessible service implemented by the provider network defines a set of supported virtualized resource instance types, further comprising:

receiving an indication, in the platform approval request, of a particular virtualized resource instance type of the set of supported virtualized resource instance types, wherein the particular candidate platform is targeted to support the particular virtualized resource instance type, wherein the capability determination operation comprises a test to check whether the particular virtualized resource instance type can be implemented on the particular candidate platform.

54. The method as recited in claim 50, wherein the network-accessible service implemented by the provider network defines a set of supported virtualized resource instance types, further comprising:

receiving an indication, in the platform approval request, of a different virtualized resource instance type that is not a member of the set of supported virtualized resource instance types, wherein the particular candidate platform is targeted to support the different virtualized resource instance type.

55. The method as recited in claim 50, wherein the platform approval request is received via a programmatic interface implemented at least in part for third-party interactions,

and wherein the one or more candidate platforms are resident at a facility external to the provider network.

56. The method as recited in claim 50, wherein the one or more candidate platforms are resident at a point-of-presence (POP) facility.

57. A system, comprising one or more computing devices configured to:

receive, at a provider network implementing a plurality of network-accessible services, a platform approval request comprising an indication of one or more candidate platforms for hosting virtualized resources;

initiate, in response to the platform approval request, a capability determination operation on a particular candidate platform of the one or more candidate platforms;

designate, based at least in part on a result of the capability determination operation, the particular candidate platform as an approved platform to be used for hosting virtualized resources that are to be configured at least in part via one or more control servers of the provider network; and

issue, from a particular control server of the one or more control servers, in response to a resource request from a client, one or more configuration commands to configure a particular virtualized resource at the approved platform using a remote command executor instantiated at the approved platform.

58. The system as recited in claim 57, wherein the particular control server is further operable to:

provide, to the client, a reply to the resource request based at least in part on a result of an operation initiated by the remote command executor, wherein the remote command executor is configured to terminate after initiating the operation.

59. The system as recited in claim 57, wherein the capability determination operation comprises checking whether the candidate platform is configurable to instantiate the remote command executor.

60. The system as recited in claim 57, wherein the capability determination operation comprises checking whether the candidate platform comprises a web server configurable to instantiate the remote command executor in accordance with the Common Gateway Interface (CGI).

61. The system as recited in claim 57, wherein the platform approval request includes an indication of a particular virtualized resource instance type, wherein the particular candidate platform is targeted to support the particular virtualized resource instance type.

62. The system as recited in claim 61, wherein the capability determination operation comprises a test to check whether the particular virtualized resource instance type can be implemented on the particular candidate platform.

63. The system as recited in claim 57, wherein the provider network defines a set of supported virtualized resource instance types, wherein the particular virtualized resource instance type belongs to the set of supported virtualized resource instance types.

64. The system as recited in claim 57, wherein the provider network defines a set of supported virtualized resource instance types, wherein the particular virtualized resource instance type does not belong to the set of supported virtualized resource instance types, wherein the platform approval request comprises an indication of one or more tests to be used to verify that the particular candidate platform is capable of implementing the particular virtualized resource instance type.

65. The system as recited in claim 57, wherein the one or more control servers are configured to designate the particular candidate platform as an approved platform for at least a set of default virtualized resource instance types, wherein the resource request from a client comprises an indication of a particular virtualized resource instance of an instance type that is not

included in the set, wherein the one or more configuration commands are issued to configure the particular virtualized resource instance.

66. The system as recited in claim 65, wherein a particular property of the particular virtualized resource instance differs from corresponding properties of each of the default virtualized resource instance types, wherein the particular property comprises at least one of (a) a performance property (b) a storage capacity property or (c) a supported software feature property.

67. The system as recited in claim 57, wherein the one or more configuration commands are transmitted via a variant of the HyperText Transfer Protocol.

68. The system as recited in claim 57, wherein the one or more configuration commands are transmitted in accordance with a variant of JavaScript Object Notation (JSON) format.

69. The system as recited in claim 57, wherein the one or more computing devices are further operable to:

implement a programmatic interface enabling a client to select a platform source for a particular resource, from among a set of available sources that includes (a) the provider network and (b) an owner of the approved platform.

70. The system as recited in claim 57, wherein the platform approval request is received from the client, and wherein the one or more candidate platforms are resident in a client network of the client.

71. A non-transitory computer-accessible storage medium storing program instructions that when executed on one or more processors implement a control server of a provider network, wherein the control server is configured to:

after receipt of an instance configuration request from a client, directed to a network-accessible service implemented at least in part using resource instances whose configuration is managed from within the provider network,

determine whether one or more configuration operations corresponding to the instance configuration request are to be performed at a remote platform external to the provider network;

in response to determining that the one or more configuration operations are to be performed at a remote platform external to the provider network,

issue one or more commands to a selected remote platform external to the provider network; and

receive, from the selected remote platform, results of the one or more commands;

in response to determining that the one or more configuration operations are not to be performed at a remote platform external to the provider network,

issue one or more commands to a selected instance host within the provider network;

receive, from the selected instance host, results of the one or more commands; and

provide a response to the instance configuration request, based at least in part on results of the one or more commands, to the client.

72. The non-transitory computer-accessible storage medium as recited in claim 71, wherein in response to determining that the one or more configuration operations are to be performed at the remote platform external to the provider network, the control server is configured to:

issue the one or more commands to a command receiver at the selected remote platform external to the provider network, wherein the command receiver is configured to instantiate a remote command executor at the selected third party platform in response to a particular command of the one or more commands, wherein the remote command executor is configured to initiate a particular operation

corresponding to the particular command, provide a result of the particular operation to the command receiver, and exit.

73. The non-transitory computer-accessible storage medium as recited in claim 71, wherein prior to issuing the one or more commands to the selected remote platform, the control server is configured to obtain a lock on the selected remote platform using a lock manager implemented within the provider network.

74. A non-transitory computer-accessible storage medium storing program instructions that when executed on one or more processors:

receive a platform approval request indicating a third party platform to be considered as a candidate to host one or more virtualized resources;

identify one or more capability tests to be executed on the third party platform, including at least one test to check whether a remote command executor configured to support a particular command protocol can be implemented on the third party platform;

initiate an execution of the one or more capability tests on the third party platform; and

determine whether to approve the third party platform based at least in part on results of the one or more capability tests.

75. The non-transitory computer-accessible storage medium as recited in claim 74, wherein the one or more capability tests comprise a particular performance test to check a performance capability of the third party platform in accordance with a performance level defined for a particular instance type supported at a network-accessible service of a provider network.

76. The non-transitory computer-accessible storage medium as recited in claim 74, wherein the one or more capability tests comprise a particular performance test to check a performance capability of the third party platform in accordance with a performance level

indicated in the approval request, for a particular instance type defined by an initiator of the approval request.

77. The non-transitory computer-accessible storage medium as recited in claim 74, wherein the instructions when executed on the one or more processors:

determine a schedule of capability test iterations to be re-executed on the third party platform to renew an approval of the third party platform;

initiate an iteration of capability tests in accordance with the schedule; and

determine whether the approval is to be renewed based at least in part on a result of the iteration.