

WE CLAIMS:

1. A method, comprising:

first determining that a first range of internet protocol addresses corresponds to a first scope; and

first displaying a first visual representation of the first scope, wherein the first visual representation comprises a first displayed bar, the length of the first displayed bar represents the span of the first scope, and each internet protocol address of the first scope has a representative position within the first displayed bar;

second determining that a second range of internet protocol addresses corresponds to a second scope;

second displaying a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar;

third determining that a third range of internet protocol addresses corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and

third displaying a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within the third displayed bar, wherein

the first visual representation, the second visual representation, and the third visual representation are displayed in a single view.

2. The method according to claim 1, wherein the first determining comprises determining that a range of internet protocol addresses corresponds to a dynamic-host-configuration-protocol scope.

3. The method according to claim 1, wherein a portion of the first displayed bar is a visual representation of excluded addresses of the first scope.

4. The method according to claim 1, further comprising:
displaying a list of at least one scope that is related to the first scope.

~~5. The method according to claim 1, further comprising:
determining that a second range of internet protocol addresses corresponds to a second scope; and
displaying a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar.~~

~~6. The method according to claim 5, further comprising:
determining that a third range of internet protocol addresses corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and
displaying a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within the third displayed bar.~~

5.7. An apparatus, comprising:

at least one processor; and

at least one memory including computer program code,

the at least one memory and the computer program code configured, with the at least one processor, to cause the apparatus at least to

determine that a first range of internet protocol addresses corresponds to a first scope; and

display a first visual representation of the first scope, wherein the first visual representation comprises a first displayed bar, the length of the first displayed bar represents the span of the first scope, and each internet protocol address of the first scope has a representative position within the first displayed bar;

determine that a second range of internet protocol addresses corresponds to a second scope;

display a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar;

determine that a third range of internet protocol addresses corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and

display a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within the third displayed bar, wherein

the first visual representation, the second visual representation, and the third visual representation are displayed in a single view.

6.8. The apparatus according to claim 75, wherein the determining that the first range of internet protocol addresses corresponds to the first scope comprises determining that a range of internet protocol addresses corresponds to a dynamic-host-configuration-protocol scope.

7.9. The apparatus according to claim 75, wherein a portion of the first displayed bar is a visual representation of excluded addresses of the first scope.

8.10. The apparatus according to claim 75, wherein the apparatus is further caused to:

display a list of at least one scope that is related to the first scope.

~~11.~~ The apparatus according to claim ~~7~~, wherein the apparatus is further caused to:

~~determine that a second range of internet protocol addresses corresponds to a second scope; and~~

~~display a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar.~~

~~12.~~ The apparatus according to claim ~~11~~, wherein the apparatus is further caused to:

~~determine that a third range of internet protocol addresses corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and~~

~~display a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within the third displayed bar.~~

9.13: A computer program product, embodied on a non-transitory computer readable medium, the computer program product configured to control a processor to perform a process, comprising:

first determining that a first range of internet protocol addresses corresponds to a first scope; and

first displaying a first visual representation of the first scope, wherein the first visual representation comprises a first displayed bar, the length of the first displayed bar represents the span of the first scope, and each internet protocol address of the first scope has a representative position within the first displayed bar;

second determining that a second range of internet protocol addresses corresponds to a second scope;

second displaying a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar;

third determining that a third range of internet protocol addresses corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and

third displaying a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, and the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within

the third displayed bar, wherein

the first visual representation, the second visual representation, and the third visual representation are displayed in a single view.

10.14. The computer program product according to claim 139, wherein the first determining comprises determining that a range of internet protocol addresses corresponds to a dynamic-host-configuration-protocol scope.

11.15. The computer program product according to claim 139, wherein a portion of the first displayed bar is a visual representation of excluded addresses of the first scope.

12.16. The computer program product according to claim 139, wherein the process further comprises:

displaying a list of at least one scope that is related to the first scope.

~~17. The computer program product according to claim 13, wherein the process further comprises:~~

~~determining that a second range of internet protocol addresses corresponds to a second scope; and~~

~~displaying a second visual representation of the second scope, wherein the second visual representation comprises a second displayed bar, the length of the second displayed bar represents the span of the second scope, and each internet protocol address of the second scope has a representative position within the second displayed bar.~~

~~18. The computer program product according to claim 17, wherein the process further comprises:~~

~~determining that a third range of internet protocol addresses~~

~~corresponds to a range of internet protocol addresses that are common to the first scope and the second scope; and~~

~~displaying a third visual representation of the third range, wherein the third visual representation comprises a third displayed bar, and the length of the third displayed bar represents the span of the third range, and each internet protocol address of the third range has a representative position within the third displayed bar.~~