

FIG. 1

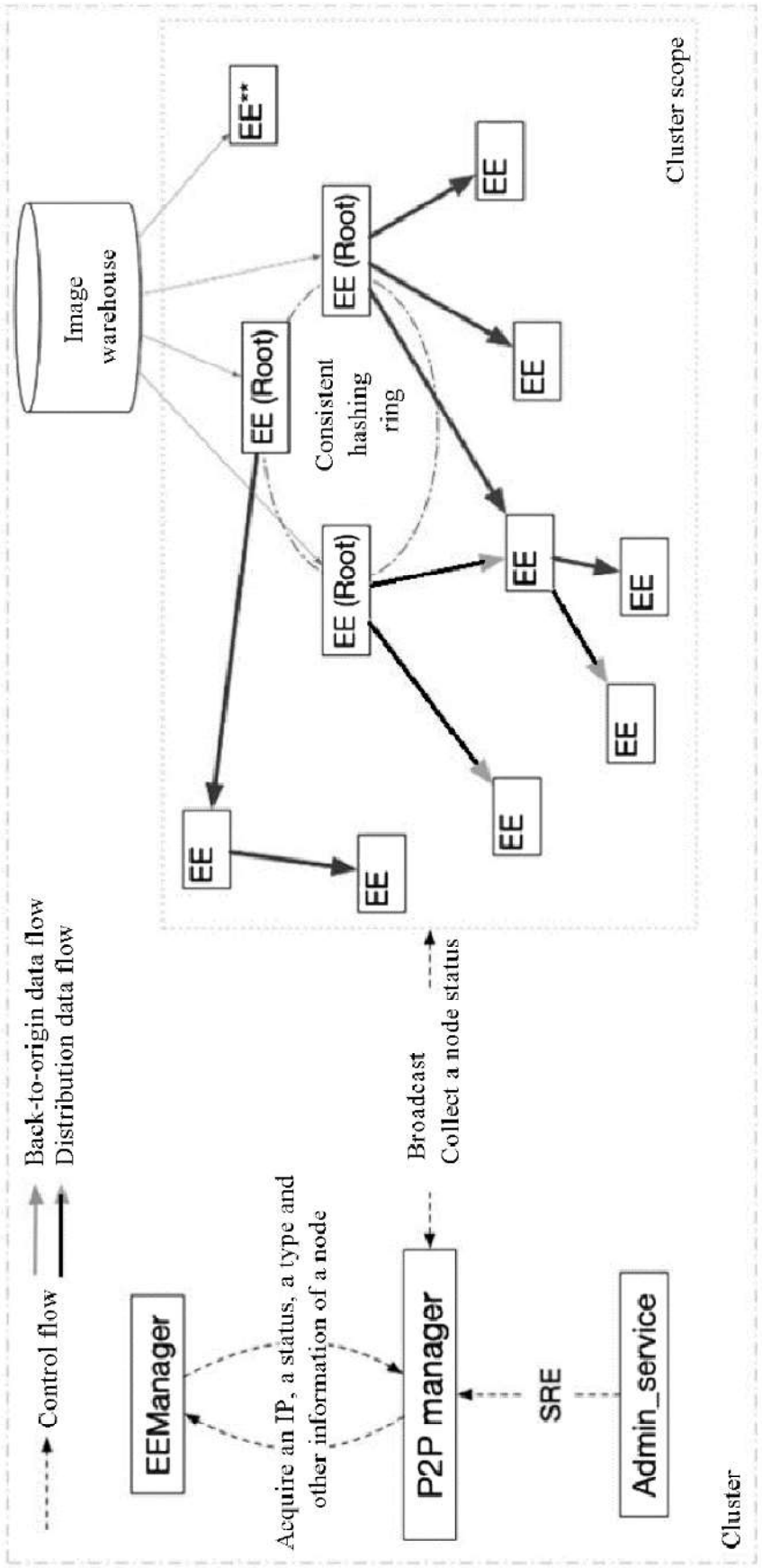

Control flow
Back-to-origin data flow
Distribution data flow
EEManager
Acquire an IP, a status, a type and other information of a node
P2P manager
Broadcast
Collect a node status
SRE
Admin_service
Cluster
Image warehouse
EE (Root)
EE (Root)
EE (Root)
Consistent hashing ring
EE
EE
EE
EE
EE
EE
EE
EE
EE**
Cluster scope

FIG. 2

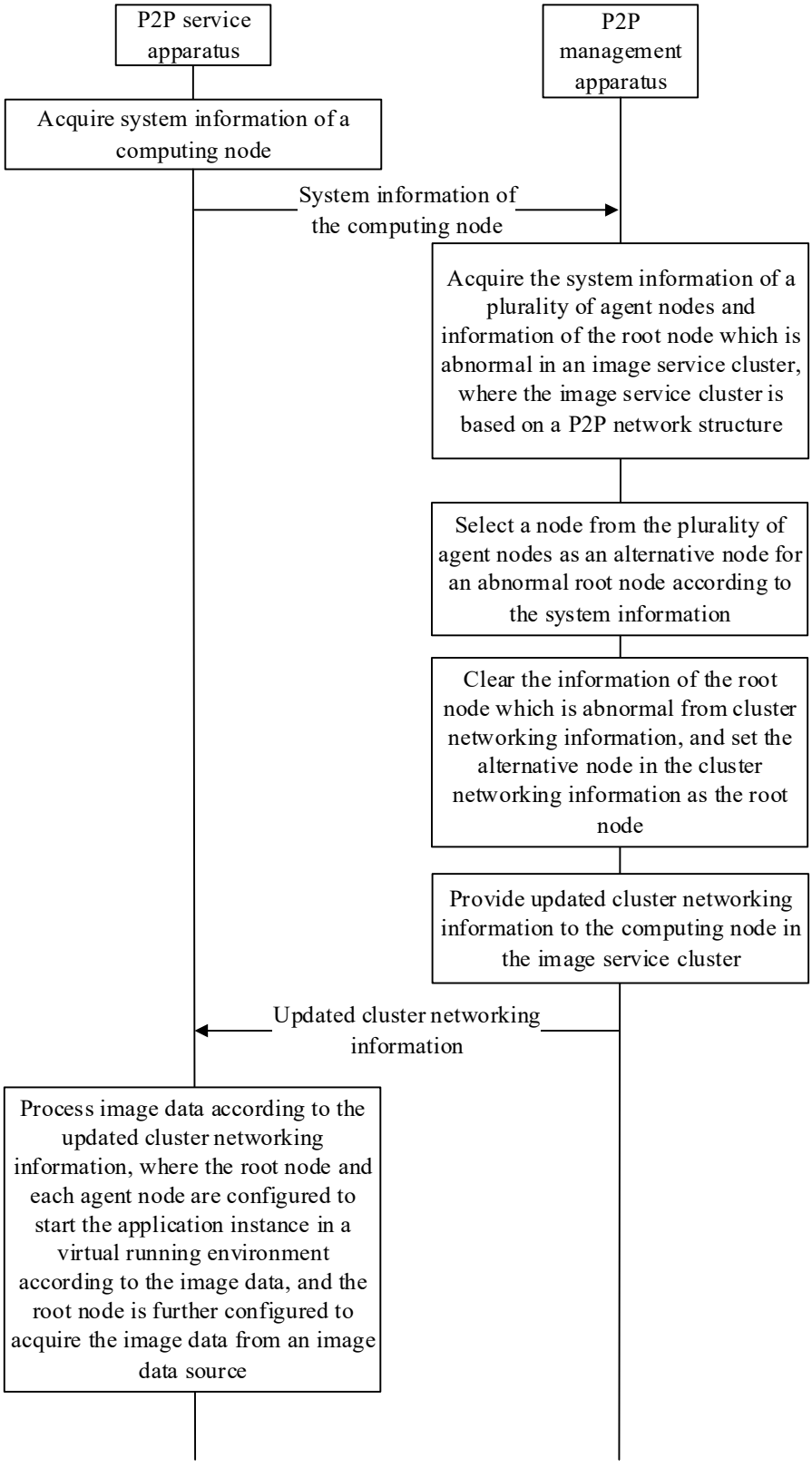
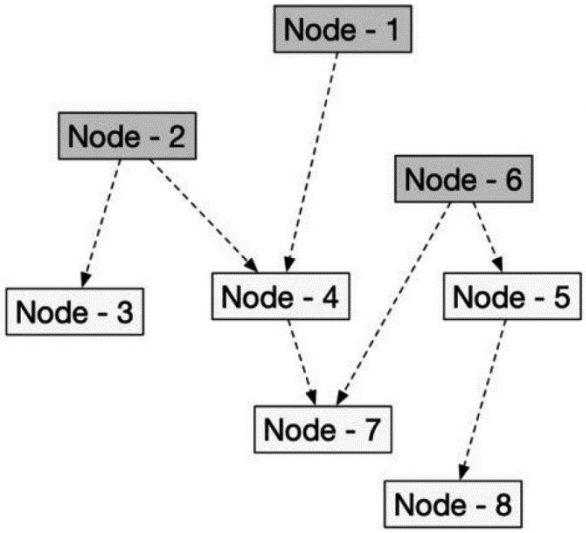
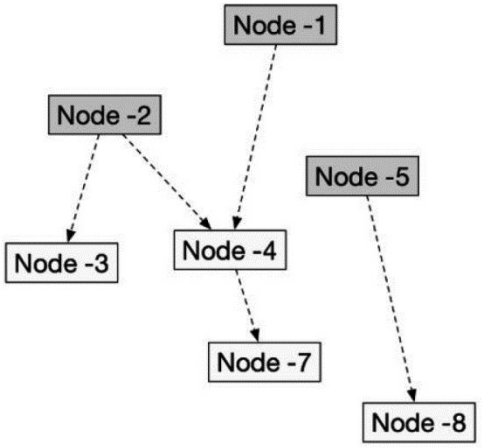

P2P service apparatus
P2P management apparatus
Acquire system information of a computing node
System information of the computing node
Acquire the system information of a plurality of agent nodes and information of the root node which is abnormal in an image service cluster, where the image service cluster is based on a P2P network structure
Select a node from the plurality of agent nodes as an alternative node for an abnormal root node according to the system information
Clear the information of the root node which is abnormal from cluster networking information, and set the alternative node in the cluster networking information as the root node
Provide updated cluster networking information to the computing node in the image service cluster
Updated cluster networking information
Process image data according to the updated cluster networking information, where the root node and each agent node are configured to start the application instance in a virtual running environment according to the image data, and the root node is further configured to acquire the image data from an image data source

FIG. 3



Role	Node list
Root	Node - 1
Root	Node - 6
Agent	Node - 3
Agent	Node - 4
Agent	Node - 5
Root	Node - 2
Agent	Node - 8
Agent	Node - 7

FIG. 4a



Role	Node list	
Root	Node - 1	
~~Root~~	~~Node - 6~~	← Node-6 is deleted
Agent	Node - 3	
Agent	Node - 4	
Root	Node - 5	← Node-5 is set as a root node
Root	Node - 2	
Agent	Node - 8	
Agent	Node - 7	

FIG. 4b

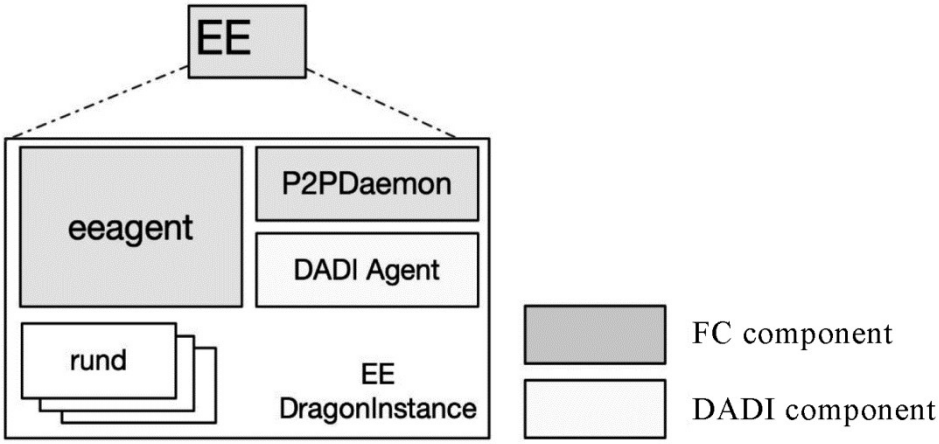

EE
eeagent
P2PDaemon
DADI Agent
rund
EE
DragonInstance
FC component
DADI component

FIG. 5

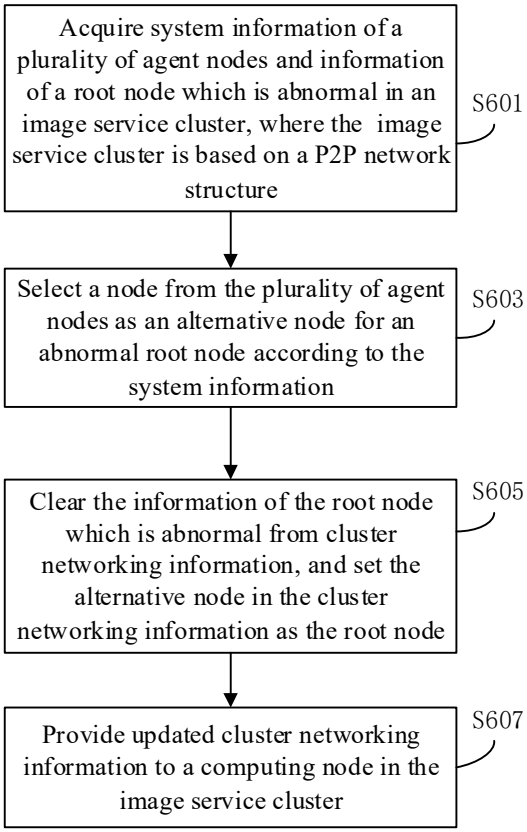

Acquire system information of a plurality of agent nodes and information of a root node which is abnormal in an image service cluster, where the image service cluster is based on a P2P network structure
S601
Select a node from the plurality of agent nodes as an alternative node for an abnormal root node according to the system information
S603
Clear the information of the root node which is abnormal from cluster networking information, and set the alternative node in the cluster networking information as the root node
S605
Provide updated cluster networking information to a computing node in the image service cluster
S607

FIG. 6

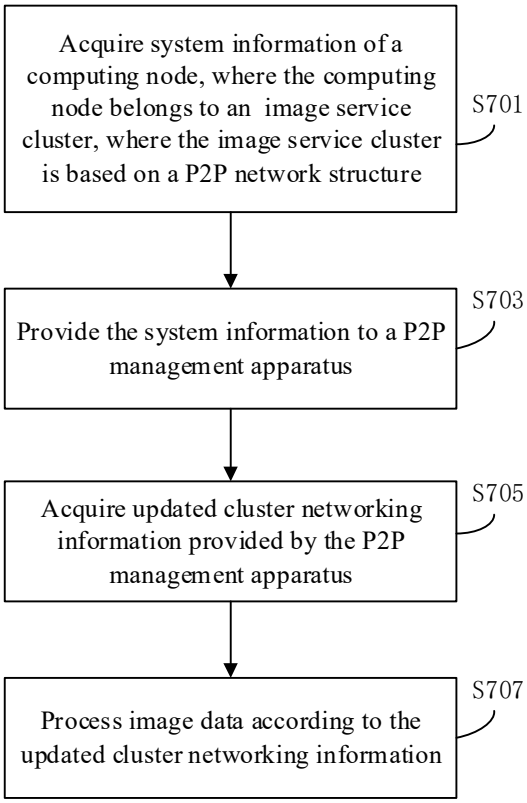

Acquire system information of a computing node, where the computing node belongs to an image service cluster, where the image service cluster is based on a P2P network structure
S701
Provide the system information to a P2P management apparatus
S703
Acquire updated cluster networking information provided by the P2P management apparatus
S705
Process image data according to the updated cluster networking information
S707

FIG. 7

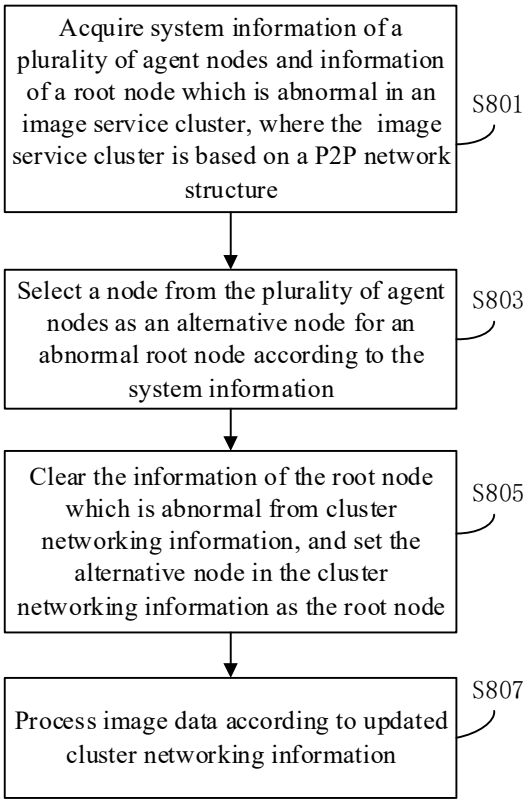

Acquire system information of a plurality of agent nodes and information of a root node which is abnormal in an image service cluster, where the image service cluster is based on a P2P network structure
S801
Select a node from the plurality of agent nodes as an alternative node for an abnormal root node according to the system information
S803
Clear the information of the root node which is abnormal from cluster networking information, and set the alternative node in the cluster networking information as the root node
S805
Process image data according to updated cluster networking information
S807

FIG. 8