The formation of a tree, which takes a lot of memory to be maintained, is the major issue with IP multicasting. This is one of the main disadvantages, and the purpose of this study is to offer a way to assist combat it. High delivery probability and low latency are required, just as they were in the former technique, but the CBT tree also has additional features including scalability, resilience, anonymity, and routing independence. The fundamental tenet is that a multicast packet only ever has to be repeated when a common path breaks into two independent ones. As a result, transmission costs are reduced and bandwidth use is minimized. The DVMRP employs a prune message that lets the sender be aware of the presence of a member. If a member becomes available, the prune message may be sooner cancelled by sending a graft message. DVMRP has the drawback of incorporating routers into a tree and storing prune/graft messages even if they are not interested in receiving the message. The CBT uses a central node known as the core, from which branches emerge that are, in our instance, known as non-core routers. Because each router on a tree saves only one incident link information—one per tree rather than keeping incident link information for each source, and group pair—the CBT enables us to easily scale. Due to the receiver-based nature of the tree construction, only routers who are interested in joining the group will do so. Using the unicast protocol, it is simple to obtain all the data about a multicast tree from the routing table. As a result, it is more reliable than the previous DVMRP protocol. This has the drawback of the core being put in an unfavorable location, which prevents it from offering the best pathways. Another issue is that the entire tree is partitioned if the core fails. Multiple cores attached to a tree are one of the solutions suggested in the study, although this would raise the cost.

A group name is a human-readable form, but a group address is an address selected independently and provided by the cbt. The group name should be selected so that there are no conflicts and that it may be used to infer some information. To prevent name conflicts, each group name should come from a specific namespace. Name conflicts that do arise may be quickly handled by keeping a local admin. As a result, a host can obtain the group id and core addresses by just requesting the group name. There are several cores, and each one has a rank. The multicast data is transmitted in packets, and each one includes a group address that is specified in the options field as well as a destination address, which is the core. When this packet is forwarded to a router that is not a member of the tree, the router will simply use unicast to forward the packet. However, as soon as the packet reaches a router that is a member of the tree, the router will replace the destination address of the core with the group id in the options field and convert the packet to a multicast packet. To check if the links are active, each router sends a stay alive message. The kid can attempt to rejoin the tree through an alternate path if a parent-child connection breaks. Additionally, a flush tree message transmitted downstairs will let the down tree know the path is down so they may connect to the core via alternative paths. Use the cores on the list if a core fails; if none of them are available, wait for a random period before trying again. Therefore, cbt offers a solution that uses less overhead and does not require non-group routers to be involved in the operation, as was the case with earlier protocols. Other than IP networks and technologies can also use it.