Feature	Description
Multipoint-to-point communication	Each node forwards packet to it's preferred parent discovered through DIO messages
Storing mode	Each node stores routing data learned from DAO messages of it's sub-DODAG
Non-storing mode	Only root/sink performs routing based on data from DAO messages, other nodes don't store routing information
Point-to-multipoint communication	Sink communicating with any node based on routing data learned from DAO messages
Point-to-point communication	Nodes communicating with each other using common ancestor (root in non-storing mode)
DODAG Information Solicitation (DIS)	Node uses DIS to probe its neighborhood for nearby DODAGs
Multiple DODAGs	 Single DODAG with single root Multiple uncoordinated DODAGs with independent roots Single DODAG with a virtual root that coordinates LLN sinks (with the same id) over a backbone network
Multiple RPL instances	Each RPL instance may have a different objective function
Mobility	 Inside a DODAG Between different DODAGs Sub-DODAG 'poisoning' on departure
Leaf mode	If node doesn't support RPL policy or objective function, it may join as a leaf node and will not broadcast DIOs
Security	AES-based secure control messages and authentication