QUESTIONS – Distributed Deadlocks

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Questions – Distributed Deadlocks

1. Differentiate reusable and consumable resources with example.
2. What are different resource request models?
3. Which types of deadlocks are handled by wait for graph (WFG)?
4. Which types of deadlocks are not handled by WFG? How this can be handled?
5. Show that how wait-die / wound-wait protocol ensures prevention of deadlocks?
6. How wait-die / wound-wait protocol can be extended to handle deadlock prevention in more than one process waiting scenarios?
7. What do you mean by false deadlocks in distributed environment? How this can be detected?

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8. Consider Chand-Misra-Haas distributed deadlock detection and recovery algorithm. How an unique victim is identified if resource request model is (a) single unit (b) AND resource request model?
9. Which is the deadlock prevention method where there is no resource pre-emption? Why?
10. Explain the situation where in a cycle in WFG does not implies the deadlock. How the deadlock can be detected in such situations?
11. Consider an OR resource request model and WFG, G = {V,E}, where V = {P1, P2, P3} and E = {<P1, P2>, <P2, P3>, <P3, P1>}. Is the system in deadlock state? Justify.