

## Perancangan Disaster Recovery Plan: Studi Kasus PT PELNI (Persero) = Design of Disaster Recovery Plan: Case Study at PT PELNI (Persero)

Angga Krisosa, author

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### Abstrak

PT PELNI Persero sebagai suatu badan usaha milik negara yang bergerak di jasa transportasi laut dituntut untuk meningkatkan kinerja operasional perusahaan dengan memanfaatkan teknologi informasi.

Berdasarkan laporan pekerjaan Divisi Teknologi Informasi tahun 2016 diketahui bahwa realisasi KPI durasi gangguan infrastruktur TI sebesar 292 jam, melebihi target maksimum yang disepakati yaitu, 43 jam/tahun.

Dari hasil analisis, diketahui bahwa salah satu penyebab permasalahannya adalah tidak adanya disaster recovery plan DRP . Penelitian ini merancang DRP yang sesuai untuk PT PELNI Persero . Perancangan DRP menggunakan tahapan-tahapan yang ada pada panduan NIST SP 800-34 Rev.1 yaitu, penyusunan kebijakan, business impact analysis, mengidentifikasi kontrol pencegahan, dan menyusun strategi kontigensi. Selain itu, analisis konsolidasi dan optimasi sumber daya server dilakukan untuk mengetahui kebutuhan sumber daya setiap aset/layanan TI.

Penelitian ini bersifat action research, menggunakan pendekatan kualitatif dengan paradigma interpretatif terhadap hasil pengumpulan data yang dilakukan melalui studi literatur, studi dokumen, observasi lapangan, dan wawancara serta kuesioner terhadap nara sumber unit kerja terkait. Penelitian ini berhasil mengidentifikasi RTO, RPO, dan tingkat dampak yang dijadikan urutan prioritas pemulihan aset/layanan TI. Berdasarkan ketiga hal tersebut, ada dua strategi lokasi pemulihan alternatif yang berhasil diidentifikasi yaitu, 9 aset/layanan TI dengan fully mirrored site dan 13 aset/layanan TI dengan hot site, sedangkan strategi backup untuk semua aset/layanan TI adalah replikasi mesin virtual aplikasi jika ada perubahan dan replikasi database secara realtime.

Hasil penelitian ini adalah dokumen DRP yang disesuaikan dengan kondisi internal dan proses-proses bisnis yang ada di PT PELNI Persero dan diharapkan dapat menjadi acuan organisasi dalam pengembangan disaster recovery center DRC .

*PT PELNI Persero as a state owned enterprise which has business in sea transportation services are required to improve the corporate operational performance by utilizing information technology. Based on the annual report of Information Technology Division in 2016, it is known that the realization of one of their key performance indicators, that is the duration of IT infrastructure interruption, has a value 292 hours exceeds the agreed maximum target value, that is 43 hours year.*

*From the result of anaysis, it is known that one of the causes is the absence of disaster recovery plan DRP . This research designs the appropriate DRP for PT PELNI Persero . This research is an action research conducted with qualitative methodology. The design of DRP uses the steps in the NIST SP 800 34 Rev.1 guidelines, policy formulation, business impact analysis, identifying prevention controls, and developing contingency strategies. In addition, a consolidated analysis and optimization of server resources is performed to determine the resource requirements of each IT assets services.*

*This study uses a qualitative approach with interpretive paradigm to find and understand the meaning of the results of data collection conducted through literature studies, document studies, field observations, and*

interviews and questionnaires to persons which are the users of IT assets services. This study has identified the RTO, RPO, and impact level as the priority sequence of IT assets services recovery.

Based on these three points, there are two alternative recovery location strategies, those are fully mirrored site for 9 assets IT services and hot site for 13 IT asset services, while backup strategy for all IT assets services is the replication of application virtual machine if there are changes and the realtime replication of database virtual machine.

The result of this study is DRP document that is fit to the internal conditions and business processes that exist in PT PELNI Persero and it is expected to be an organizational reference in the development of a disaster recovery center DRC.