Effective Data Processing and Protection Techniques for Community Network Nodes

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Abstract:

The Great East Japan Earthquake seriously damaged communications networks in very wide areas. If community network nodes can process, protect and store emergency data under such disaster situations that network services are temporarily unavailable, we can immediately utilize such data, which include the most significant data generated just after the disaster, once the services are recovered. The data includes information about the safety of people, financial transactions, and medical diagnosis in addition to speech/image/video data at the disaster site. With this background, we investigate and develop an effective data processing technique to achieve the above functionalities in the nodes. We also study an effective data protection technique for sensitive data that need to be stored in nodes.