CLOUD DEPLOYMENT

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To achieve intelligent maintenance of firefighting facilities, it needs to identify every facility and record the data including basic information and maintenance records so that we can obtain real-time operating status of fire-fighting facilities, to find out the problems in the operation of fire-fighting facilities in time and eliminate the hidden danger in the bud. Therefore, the cloud platform for smart fire facilities maintenance designed by this paper consists of IoT infrastructure layer and cloud platform layer. Figure I shows the architecture diagram

		Access layer			
	Application Layer	Maintenance system			
		Task management	Query	Other	
		Facilities archive management			
Platform Layer					
	Basic Platform	Resource Management			
	Layer	Server management	Virtual machine management	Data	
		Application management	User management	Center	
		Deploy management	40000		
		Virt	ualization Layer		
		Gateway			
loT Infrastructur e Layer	IoT Nodes	R	FID terminal		
		Firefighting facilities		RFID tags	

FIGURE I. THE PLATFORM ARCHITECTURE

In the IoT infrastructure layer, real-time on-line monitoring of firefighting facilities can be accomplished by deployingself-developed IoT monitoring nodes to collect firefighting facilities data such as water pressure and powersupply in real time, and then forwarding the data to the cloud platform, so that abnormal situation can be found and processed in time. RFID tags are used to identify firefighting facilities, and the RFID terminal can upload the real-time data like the data of facilities maintenance so as to achieve accurate and timely collection and tracking of facilities data.