

NIC-CENTRE OF EXCELLENCE ON MICROSERVICES – KOCHI

Residential Training Programme on Microservices & DevOps : 21st to 25th October 2024

The 6th batch of NIC Officers completed the technology update programme on Microservices and DevOps from NIC Centre of Excellence on Microservices (NIC-CEM) Kochi. The 5 days residential training programme was organized from 21st to 25th October 2024 by NIC Training Division in association with CEM. Twenty-Nine participants from NIC pan India attended the programme.



The programme was formally inaugurated online by Dr. Rajesh Kumar Pathak, DDG & HoG (Training Division). The inaugural session was presided over by Shri. Manoj P A, HoD, NIC-CEM. Dr. Pathak had briefed the participants on various Technology/Management update programmes organized by training division through various channels and explained the objective of the residential training programme. He had advised the participants to be attentive and to adopt emerging technologies for efficient service delivery. HoD CEM explained the need for adopting DevOps in NIC projects for timely delivery and quality products. Smt. Parvathi Devi P, Sc.-F, NIC CEM extended a warm welcome and Smt. Jeena Vinod Mathew, Sc.-F, NIC CEM rendered the vote of thanks.

Residential Training Programme on Microservices and DevOps

Technical Update Programme by Training Division NIC HQ from 21 - 25 October 2024
NIC Centre of Excellence on Microservices Kochi



Sessions on Basic Concepts & Principles of Microservices, DevOps, various patterns used, migration of monolithic architecture to MSA, Database management, Communications, Container Technology and containerization practical etc. were covered by NIC-CEM faculties. The participants were introduced to DevOps Project Management tools like Git and Jenkins by Mr. Vipin Bose, NIC Kerala State Centre. RTP Batch-2 Participant, Mr. Ashwini Kumar Tiwari from Mail & Messaging Division, NIC HQ demonstrated RabbitMQ, Mr. Niladri Bihari Mohanty from NIC Odisha State Centre explained and demonstrated Kafka for communications in Microservices and Mr. Keshaw Kumar, Cloud Technology Division, NIC HQ on NIC DevOps Resources along with workload deployment.

AWS Inc. delivered sessions on Docker, Kubernetes and AWS-ELK. RedHat explained about core features of OpenShift, Modern Frameworks & Technologies to evolve common microservices patterns and concepts of DevSecOps. Oracle Cloud-India handled sessions on Oracle Cloud, Hyperscaler, Github, Jenkins and Kubernetes.

Mr. Prahlad Kumar Jat, NIC Rajasthan State Centre, who was a RTP Batch-1 participant, shared the knowledge in adopting Microservices Architecture & DevOps in migrating IFMS application to MSA. Shri Boddepalli Venkata Ramana, Scientist-D, Odisha demonstrated CI/CD pipeline implementation using various DevOps Tools in their application.

An online test for the participants was conducted in association with NIC Odisha State Centre. All participants fared well in the test. Ms. Neha Kumari Shaw, Scientist-C, Transport Division, scored top marks in the online test.



A PoC was presented on the last day of the training by the participants, forming six teams. All teams presented their PoC well. The evaluation panel chaired by Smt. Jeena Vinod Mathew, Scientist-F and members from CEM and Kerala State Centre evaluated the PoC presentations based on the concepts/innovative ideas, suitability for MSA, identification of services, tools/languages/frameworks proposed/used and presentation skills.

Winners ofPoCpresentation:

First Position:

Team-6 : Shri Chandan Pandey, Scientist-D, Delhi, Shri Vineet Kumar, Scientist-D, Delhi, Shri Gaurav Kumar, Scientist-C, Uttarakhand, Shri Jyoti Prakash Behera, Scientist-C, Odisha and Ms. Dhivya T, Scientist-B, Tamil Nadu presented migration of ePost Office to MSA and stood 1st position in the competition.

Second Position:

Team-4 : Smt. A Ramadevi, Scientist-D, Tamil Nadu, Shri Vineet Kumar Garg, Scientist-D, Uttar Pradesh, Shri Miraj Husain, Scientist-C, Uttar Pradesh, Shri Vishnu Pratap Pal, Scientist-C, Delhi, Shri Sandeep Chauhan, Scientist-B, Maharashtra won second position with migration of CCTNS application to MSA.

Third Position:

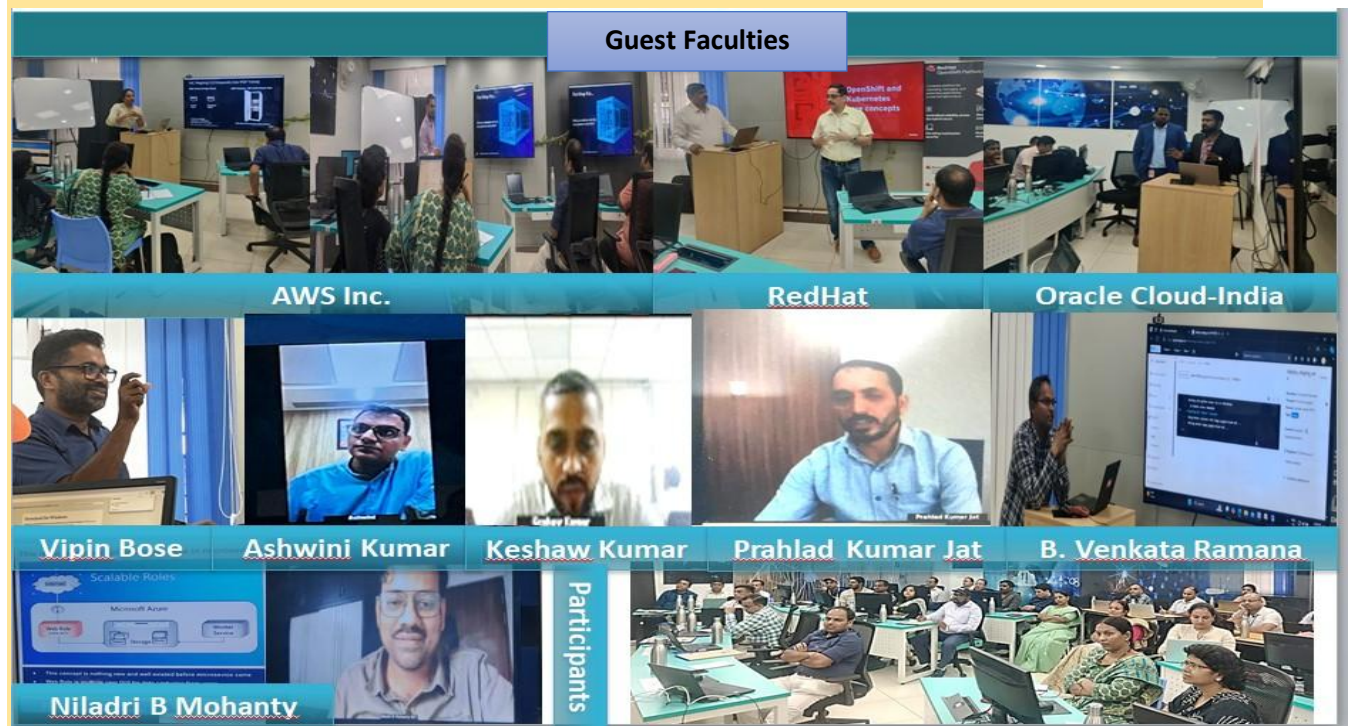
Team-3: Shri Ratan Singh, Scientist-D, Uttarakhand, Shri Avinash Kumar, Scientist-D, Delhi, Shri B. Esakkiappan, Scientist-C, Delhi, Shri Pushpankar Chand, Scientist-C, Madhya Pradesh and Smt. Neha Kumari Shaw, Scientist-B, Delhi secured the third position by presenting adoption of MSA for Shram Suvidha portal.

Prizes were distributed to the members of the team, who won first three positions, during the valedictory function. All other participants were given consolation prizes.

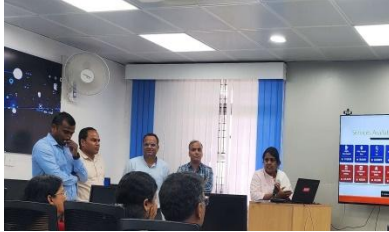
The training programme concluded with distribution of participation certificates and a copy of group photo to all, followed by Vote of Thanks by Smt. Jeena Vinod Mathew, Scientist-F, NIC CEM. HoD CEM joined the concluding session over VC.

Glimpses of Sessions

Technical Sessions



PoC Glimpses:



PoC 1st Prize Winners



PoC 2nd Prize winners



PoC 3rd Prize winners