DHANEKULA INSTITUTE OF ENGINEERING & TECHNOLOGY

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Instuite of Engineering& Technology

TECHNICAL MAGAZINE

COMPUTER SCIENCE & ENGINEERING

BYTES

2016-2017

DHANEKULA INSTITUTE OF ENGINEERING AND TECHNOLOGY

Dhanekula Institute of Engineering & Technology, established in the year 2009 is the first of its kind Technical Institute founded by Sri Dhanekula Ravindranath Tagore, a visionary and a living legend. He is famous for his versatility and excellence in promoting various agricultural and industrial organizations and is known for his love and affection-uplifting the economically backward classes. Affiliated to JNTUK, Kakinada and approved by AICTE, it aims at providing a sound technical knowledge and broad vision to the technocrats of future as they are prepared for a successful tomorrow. Founded in the year 2009, the institution intends to fabricate proficient engineers to face the dynamic changes of the present century.

The institute is located in a serene atmosphere with magnanimous buildings, state of the art laboratories and class rooms to meet the latest trends of teaching requirements in the area of technical teaching and learning. Well Qualified, experienced and dedicated staff who remain update with the latest developments in their fields is an additional asset to the college.

This world class institute with global standards offers courses at the Undergraduate level in five areas of engineering, at the Post Graduate level in two areas of engineering and at Diploma level in two areas of engineering.

CONTENTS

Department of Computer Science & Engineering

The mission of the department is to advance and enhance computer science engineering fundamentals to build the intellectual capital of students. The CSE Department Endeavour's to be an important resource centre for the development of computing systems and applications.

The Computer Science & Engineering (CSE) department is established in 2009, offers Undergraduate program (B. Tech.) in Computer Science and Engineering with an initial intake of 60 seats (during Academic year 2009-10) and an additional intake of 60 (120 seats during the Academic year 2010-11). This department has truly become the centre for learning with its excellent infrastructure and other facilities. The college is also having the M.Tech CSE program, from academic year 2012.

The department is having well qualified and experienced faculty members. The faculty is a perfect blend of different specializations in Computer Science and Engineering to impart their expertise in handling diversified courses of the Undergraduate programs.

DEPARMENT ACTIVITIES...

Faculty development programs

Real time learning @ FDP on "PYTHON & R PROGRAMMING"

The Dept. of CSE conducted a 6-day National -level FDP on **"PYTHON & R PROGRAMMING"** in association with **NIT, Warangal** during 26th - 31st Dec'16. Program was jointly coordinated by **Dr.B.SrinivasRao**, **HOD**, **CSE.** A number of faculty from several colleges including our Faculty participated.

The program was inaugurated by **Dr.P.Uday Bhaskar Garu** Director APPSC, in the presence of **Dr.K.Ravi** Principal of DIET, **Dr.B.SrinivasRao**, HOD, CSE. **Dr.D.V.L.N Somayajulu NITW**, **Mr. Saya Srinivasulu** Abheri technologies, **Mr. Anoop Jyant Kelkar** Vyclean, acted as the resource persons.

Dr. P.Uday Bhaskar Garu Director APPSC *inaugurating the FDP program*

Keynote address by **Dr. D.V.L.N. Somayajulu** *NIT, Warangal*

Dr. D.V.L.N. Somayajulu, NITW

The resource person snapped in action @ FDP

Mr. Saya Srinivasulu

The resource person formulating the difficulty

Mr.Jayanth Kelkar

All the participants in the FDP program

participants from various colleges

Real time learning @ FDP on *"FDP on Outcome Based Education"*

The Dept. of Computer Science and Engineering organized a 6-Day Faculty Development Program (FDP) on "**OUTCOME BASED EDUCATION**" during *6-11 JUN'16* in association with **NIT, Warangal**. The program was inaugurated by **Prof. V.S.S. Kumar, Hon'ble VICE-CHANCELLOR, JNTUK Kakinada,** in the presence of Bhavani Prasad Garu, Secretary of DIET, Dr. RAVI Garu Principal of DIET, Dr. B.SrinivasRao Garu, HOD, and CSE. Dr. Prasad Krishna the resource persons in the program.

Dr.V.S.S.Kumar VC of JNTUK Lighting the lamp

Dr. V.S.S.Kumar VC of JNTUK addressing the participants

Prof. V.S.S. Kumar, Hon'ble **Vice- Chancellor** of JNTU-K visited our campus on 6th Jun'16.While addressing the Faculty, he lauded the efforts of our institution for its excellent infrastructure and reputation in the region as a quality-conscious institution and assuring the need of such programs to update the skills of the faculty.

Key note addressing by Dr. Prasad Krishna NITS

Dr. A. Sarath Babu Prof & HOD Dept of Chemical Engineering , NITW snapped in action @ FDP

Dr. T. Ramesh Prof & Incharge NIT AP Interacting with the faculty @FDP

Participants Showing enthusiasm in learning

Learning current Technology real time @ FDP on
"BIG DATA ANALYTICS & COMPUTER FORENSICS"

The Dept. of Computer Science and Engineering (CSE) organized a 2-Day Faculty Development Program (FDP) on "**Big Data Analytics & Computer Forensics**" from 2nd MAY'16 to 4th MAY'16. The program was inaugurated by **Dr.R.B.V.Subramanyam**, in the presence of **Dr. K.Ravi**, Principal, Dr**. B.Srinivas Rao**, HOD. **Dr.R.B.V.Subramanyam**, **Dr.B.Srinivasa Raju**, **Dr.A.S.N.Chakravarthy** acted as the resource persons in the program.

Inaugural by HOD and R.B.V.Subramanyam

HOD *of CSE addressing the participants*

HOD of **CSE Dr. B.Srinivas Rao** Garu suggested the participants that the Outcome-based education (OBE) means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences. This program is open to the teachers of engineering colleges and helps in continuous assessment at logical interval.

Dignitaries Dr. B.Srinivas Rao, HOD CSE, Dr.A.S.N. Chakravarthy, prof JNTUK, & Dr. Ravi pricepal DIET on the dais

Principal Dr. Ravi Kadiyala Felicitating T.HANUMAN CHOWDARY IT advisor to the Government of Andhra Pradesh

FDP on Rational SEED Program

The Dept. of Computer Science and Engineering (CSE) organized a 2-Day Faculty Development Program (FDP) on "FDP on **Rational SEED program** from 9th OCT'15 to 10th OCT'15. The program was inaugurated by **Mr.Venu Tadiparti**, in the presence of **Dr. K.Ravi**, Principal, Dr**. B.Srinivas Rao**, HOD, CSE. Mr Venu Tadiparti acted as the resource persons in the program.

Rational is an Object-oriented programming (OOP) and unified modeling language (UML) tool to design enterprise-level software applications and components. It creates visual software application models under object oriented principles.

IBM Rational Software Architect provides comprehensive design, modeling and development tools for model-driven development (MDD) using robust support for Unified Modeling Language (UML). Rational Software Architect is built on the Eclipse open – source software framework and is extensible with variety of Eclipse plug-ins. A focus on architecture and design can help organization turn complex Software into simple design and deliver business goals. IBM Architecture and design solution help align products, Systems.

FDP on Student Counseling

Dr. Pattabhiram Garu addressing the gallery

Dr. Pattabhiram's approach to personal growth and personality development has been proven successful over 30 years of treating, motivating and counseling people. While the field of education has been in Psychology, The passion towards the studies should make any student study hard and achieve their goals by their hard work made. No student should be left alone without any fears and lack of concentration on their knowledge. Colleges like these provide a very good interacting facility to gain a lot of knowledge and help them to fulfill their dreams to make them

GUESTLECTURES/SEMINARS/WORKSHOPS

1. Oracle Academy conducted a 10-day work shop on "Java Certification course" by Oracle Academy from 19th JAN15. This workshop was conducted by Mr. Praveen Kumar Reddy as the resource person.
2. A astonishing seminar on "Phython Programming" was conducted on 11th FEB15. This seminar was given by Dr.KV Ramana , Mr.G.Srinivas, Mr.K.Vamsi.
3. A webinar was organized on "Mobile application development" from 8th JUN15 to 20th JUN15. This is to develop the knowledge on the current going technology.
4. A divulgence seminar on "Trends in Technology & Planning Careers" by Mr. Anil Nori on 2nd JULY 15. After this session the students have a clear thinking on the future plans on their career.
5. A workshop on "Knowledge Management & Career Opportunities" by P.Ravi Kiran, L.Vasanth Geetha on 29th OCT 15 and 30th OCT15.
6. A seminar about the updated technology "Rapid Application Development using Cloud platforms" was conducted by Dr. Ganesh Iyer on 8th OCT 15.
7. A 5-day training program was conducted by the Oracle on "Oracle Training Program" by Mastanuali. Shaik on 4th JAN 16.
8. A 4-day training program was conducted on "Amazon training Program" by L.V.Gopal from 12th FEB16.
9. A seminar on "Latest Trends & Technology in CSE" to enlighten the students about the current technology was conducted by Mr.Abhishek Tallapragada on 5th MAR16.
10. A 2-day workshop on "Cyber Security & ethical Hacking" was conducted by D.Sai Satish on 16th and 17th MAR16.
11. A "Webinar on Career Guidance" was conducted by Ms.S.Swarna Sudha on 26th JUL 16 to give a clear view on the students career planning.
12. A 2-day workshop on "Hadoop & Big Data" was conducted by V.Anjaneya Raju on 29th JUL 16. With this workshop it has given a clear view on all the updated technology that is currently running in the air.
13. A seminar on "Compiler Design" was conducted by U.S.N.Raju on 8th APR 16.
14. A 2-day workshop was conducted on "Ethical Hacking" by D.Sai Satish on 16th and 17th APR16.

RESEARCH ACTIVITIES

Publications

S.	Staff	Da	Name of	Journal/Confe	Identificat
1	Dr.B.Srinivasa Rao	May-15	IJSETR	Cloud Storage Security Interactive Proof System on Provable Data Possession using Audit Service	ISSN 2319-8885 Vol.04,Issue 12, May 2015,Pages:2314-2317
2	Mr.P.V.Hari Prasad	May-15	International Journal of Engineering and Science Research	Dynamic Authentication For DOS Attacks Using Snort Rule	ISSN:2277-2685,Vol 5,May 2015,PP:370-375
3	Mr.B.B.K.Prasad	May-15	International Journal of Engineering and Science Research	Correlated Clustering Specification Using Ant Colony Optimization	ISSN:2277-2685,Vol 5,May 2015,PP:376-379
4	Mr.B.Venu Gopal	May-15	International Journal of Engineering and Science Research	Intrusion Detection By Fuzzy Genetic Algorithm	ISSN:2277-2685,Vol 5,May 2015,PP:573-581
5	Mr.D.Ratna Kishor	May-15	(IJRCSE)international journal of research in computer science engineering	Human Activity Recognition Based on Image Segmentation	ISSN: 2321-5585
6	Mr.K.Sandeep	May-15	International Journal of Engineering & Science Research	Characters Recognition Of Automobile License Plates On The Digital Image	Vol-5, Issue-5, May 2015, Pages: 302-309, ISSN 2277-2685
7	Mr.A.Satish Kumar	May-15	International Journal of Innovative Research in Computer Science & Technology (IJIRCST)	Gender-Driven Emotion Recognition System Using Speech Signals For Human Computer Intelligent Interaction	ISSN: 2347-5552, Volume-3, Issue-3, May 2015
8	Mr.K.Sandeep	May-15	International Journal of Innovative Research in Computer Science & Technology (IJIRCST)	Gender-Driven Emotion Recognition System Using Speech Signals For Human Computer Intelligent Interaction	ISSN: 2347-5552, Volume-3, Issue-3, May 2015

9	Ms.L.N.B.Jyotsna	May-15	International Journal of Engineering and Science Research	Maximum Utility sets using Data streams	ISSN: 2277-2685, May 2015, Vol:5, PP:380-384
10	Ms.M.Ragini	May-15	International Journal of Engineering and Science Research	Privacy Preserving of Publication Users Using Tuple Grouping Methods	ISSN : 2277-2685,May 2015,Vol:5,PP:363-369
11	Ms.M Hima Jyothi	May-15	International Journal of Engineering and Science Research	Secured Profile in Social Networks using Machine Learning	ISSN:2277-2685,May 2015,PP:173-178
12	Ms.P.Sunitha	May-15	International Journal of Research in Computer Science and Engineering	Fuzzy And GE Based Intelligent Traffic Control For High Speed Networks	ISSN:2277-2685,May 2015,PP:173-178
13	Mr.V.V.R.Manoj	May-15	International Journal of Engineering & Science Research (IJESR)	Extensible And Privacy Distribution Phi In Cloud Computing Using Hierarchical Attribute-Based Encryption	Vol-5/Issue-5/316-321, ISSN 2277-2685, May 2015
14	Mr.V.V.R.Manoj	May-15	International Journal of Computer Applications (IJCA)	Enhanced Face Recognition based on PCA and SVM	Volume 117- NO.2, ISBN: 973-93-80886-46-3, May 2015.
15	Mr.K.Venkata Narayan	May-15	International Journal of Computer Applications (IJCA)	Enhanced Face Recognition based on PCA and SVM	Volume 117- NO.2, ISSN: 973-93-80886-46-3, May 2015.
16	Ms.S. Naga Sindhu	May-15	International Journal of Engineering and Science Research	Image Retrieval By Using Digital Image Processing and GA	Volume 117- NO.2, ISBN: 973-93-80886-46-3, May 2015.
17	Ms.K.Swathi	May-15	IJCA	Enhanced face recognition based on PCAand SVM	ISSN:0975-8887,VOL 117, MAY 2015,PP:40-42
18	Mr.T.Vamsidhar	Aug-15	International Journal of Image Processing And Application in Computer Science Engineering	An Effective Driver Fatigue Status Recognition Using Edge Detection And Fuzzy Logic:An Indian Perspective	ISSN:2277-129X,VOL-5, Aug 2015,PP:28-34
19	Ms.K. Sandhya Rani	Aug-16	Journal of Global Research in Computer Science	An Effective Global Face Name 0Matching Framework Using Error Correcting Graph Matching Algorithm	ISSN:2277-129X,VOL-6, Aug 2015,PP:30-35
20	Ms.M.Sri Devi Sameera	May-15	International Journal of Innovative Research in Computer Science & Technology (IJIRCST)	Gender-Driven Emotion Recognition System Using Speech Signals For Human Computer Intelligent Interaction	ISSN: 2347-5552, Volume-3, Issue-3, May 2015
21	Ms.K.Sowmya	Jul-16	International Journal of Computer Applications (IJCA)	Monitoring Software Failure Process using Half Logistic	Vol-145-No-4
22	Mr.K.Satheesh	Mar-16	Noval hardware parameters based cloud data	JATIT	29952

COFERENCES ATTENDED

S No	Name of the	Dept	Name of the Conference	Title of the Paper	Publication Detai
1	Mr.K.Satheesh	CSE	International Conference on Advances in Computing, Communications and Informatics	Data Authentication and Integrity Verification Techniques for Trusted /Untrusted Cloud Servers	978-1-4799-3080-7/14(ICACCI),2014
2	Mrs P.Sunitha	CSE	Recent Trends in cyber Security	Implementation of Visual and Quantum Cryptography Techniques	28-29/3/2016
3	Mr.R.Phani Kishore	CSE	Recent Trends in cyber Security	Cynical Email Perception	28-29/3/2016
4	Mr.P.Jagade eswara Rao	CSE	Recent Trends in cyber Security	Implementation of Visual and Quantum Cryptography Techniques	28-29/3/2016
5	Mr.R.Phani Kishore	CSE	7th International Conference on Cloud Computing Computer Science And Advances In Information Technology-ICCCCIT 2015 - COftFEREftCE PUBLICATIOft	Privacy Preserving Complemented Collaborative Tagging By Using Fuzzy Linguistic Multi Agent Model For Information Gathering On The Web	2015

STAFF RESEARCH COLLOQUIA

Department of CSE helps the faculty to persuade the research, in the same way the faculty shows their engrossment to present their research knowledge by presenting seminars.

S.No	Date	Time	Name of the Faculty	Topic Presented
1	25-07-2015	04:30-05:30	Dr.B.Srinivasa Rao	Digital Image Processing & its Applications
2	01-08-2015	04:30-05:30	Mr.K.Sateesh	Cloud Computing – Scope of Research
3	22-08-2015	04:30-05:30	Mr P V Hari Prasad	Optimization of Routing & Traffic Engineering in Wireless Mesh N/W's
4	19-09-2015	04:30-05:30	Mr N Ashok	Internet Of Things
5	31-10-2015	04:30-05:30	Mr.B.B.K.Prasad	Scope of Research in Computer Architecture
6	21-11-2015	04:30-05:30	Mrs K Sowmya	Variants of Cloud Computing
7	06-02-2016	04:30-05:30	Mr.B.Venugopal	Net Neutrality

8	20-02-2016	04:30-05:30	Mrs.M.Ragini	Big Data in Engineering Applications
9	02-04-2016	04:30-05:30	Ms.P.Sunitha	Search Engine Optimization & Analysis using Improved Memetic Algorithm
10	02-07-2016	04:30-05:30	Mr.K.Sandeep	Emotion Recognition System using SIRI
11	23-07-2016	04:30-05:30	Mrs.S.Praneetha	Revolution on 3D printing
12	17-09-2016	04:30-05:30	Mrs.L.N.B.Jyotsna	MIKTEX

Faculty Activities

Moving One step ahead

Faculty Achievements

Department of CSE is proud to say that our faculty has achieved their goal in research and gaining their PhD admission in various universities.

1. K.Satish in *Acharya Nagarjuna University(2012)*
2. P.H.V.Hari Prasad *Acharya Nagarjuna University(2012)*
3. D.Ratna Kishore in *Jawaharlal Nehru Technological University Anathapur(2012)*
4. **P.Sunitha** in *Jawaharlal Nehru Technological University Kakinada(2015)*
5. **N. Ashok** in *Acharya Nagarjuna University(2016)*
6. **K. Sandeep** in *Acharya Nagarjuna University(2016)*
7. **Ch. Padmini** in *Acharya Nagarjuna University(2016)*
8. **M. Sameera** in *Acharya Nagarjuna University(2016)*
9. **M. Syamala** in *Annamalai University Chennai(2016)*

Student Activities ⭐ 👑 🏆

Placements

❖ **Tata Consultancy Services (TCS)**, the software giant selects 2 candidates from the final year of CSE,¬ 2016-17 as Software Engineers as per the communiqué received on 1st Nov.16. The Management, Director, Principal, Secretary, Faculty & Staff congratulated the successful candidates on their superlative achievement.

    ☐ **A.Aravind Kumar**

    ☐ **A.Javed**

❖ **Hindhuja Global Solutions (HGS)**, the MNC company selects 3 candidates from the final year of CSE,¬ 2016-17 as per the communiqué received in FEB 17. The Management, Director, Principal, Secretary, Faculty & Staff congratulated the successful candidates on their superlative achievement.

    ☐ **N.V.S.S. Hari Kumar**
    ☐ **G. Madhuri**
    ☐ **B. Bhavana**

❖ **IBEON INFOTECH**, the software company selects 1 candidate from the final year of CSE,¬ 2016-17 as Software Engineers. The Management, Director, Principal, Secretary, Faculty & Staff congratulated the successful candidates on their superlative achievement.

    ☐ **B. Krishna Chaitanya**

❖ **National Cash Register (NCR)**, the MNC company selects candidate from the final year of CSE,¬ 2016-17 as Software Engineers as per the communiqué received in NOV 16. The Management, Director, Principal, Secretary, Faculty & Staff congratulated the successful candidates on their superlative achievement.

    • **A. Kishore Kumar**

❖ **Mercedes-Benz**, MB company selects 3 candidate from the final year of CSE,¬ 2016-17 as per the communiqué received in NOV 16. The Management appreciated their achievement.

    ☐ **K. Krishna Sree**
    ☐ **Md. Thazain**
    ☐ **B. Udayamouni**

❖ **Concentrix**, a software company selects 1 candidate from the final year of CSE,¬ 2016-17 as per the communiqué received in OCT 16. The Management appreciated their achievement.

    ☐ **J. Dimple Sri Mydhili**

❖ **CVCorporate Services pvt.ltd**, a software company selects 1 candidate from the final year of CSE,- 2016-17 as per communiqué received in AUG 16. The management appreciated their achievement.

    ☐ **P.Vineetha**

Students Achievements

Name	Achievemen	Event	College
B.Chandra Prakash	1st prize	Paper Presentation	AFOSEC 2K17,VRSEC
K. BalaKrishna D. Brahmeshwara Rao	1st Prize	Technical Quiz	Dhanush 2k17,DIET
T.Aasritha A.Bhargavi	1st Prize	Theme ballet	Dhanush 2k17,DIET
K. Muralidhar	2nd Prize	CRUZEE	AFOSEC 2K17,VRSEC
G. Sai Tarun	3rd Prize	CRUZEE	AFOSEC 2K17,VRSEC
Jaffar	2nd Prize	Blind C	AFOSEC 2K17,VRSEC
Jaffar Y. Hussain	1st prize	Coding Club	SRKIT
L.Vamsi Krishna Vardhan	1st Prize	Technical Quiz	AFOSEC 2K17,VRSEC

ASSOCIATION ACTIVITY

The department of CSE is conducting association activity which helps to unite among the students and share their knowledge with each other.

Helping everyone to acquire some knowledge both technically and non-technically and boost up their communication skills by presenting

Annual Day Gala

Dhanekula Ravindranath Tagore the Chairman of Dhanekula institute of engineering and technology handing over the prize to the winners in the eve of Annual Day 2k16. There are many number of cultural programs that are conducted on that day and department of CSE had triumphed many awards.

FEST FIESTA 2K17

The event was inaugurated by **Mr. Santhi Pavan** from IIT,madras in the companionship of **Dhanekula Ravindranath Tagore** garu, chairman ,DIET and **Dr. Ravi Kadiyala** Garu, Principal,DIET.

All the HOD's released the Dhanush 2k17 broucher.

Articles
MOBILE COMPUTING

By—   K. BHARATH KUMAR, IV CSE

Mobile computing is human–computer interaction by which a computer is expected to be transported during normal usage. Mobile computing involves mobile communication, mobile hardware, and mobile software. Communication issues include ad hoc and infrastructure networks as well as communication properties, protocols, data formats and concrete technologies. Hardware includes mobile devices or device components. Mobile software deals with the characteristics and requirements of mobile applications. Mobile computers are spreading faster than any other consumer technology in history. Smart phones have even begun reaching the group of relative technophobes that consumer researchers call the "late majority." About half of mobile-phone users now have one.

Mobile security or mobile phone security has become increasingly important in mobile computing. It is of particular concern as it relates to the security of personal information now stored on the smart phone. More and more users and businesses use smart phones as communication tools but also as a means of planning and organizing their work and private life. Within companies, these technologies are causing profound changes in the organization of information systems and therefore they have become the source of new risks. Indeed, smart phones collect and compile an increasing amount of sensitive information to which access must be controlled to protect the privacy of the user All smart phones, as computers, are preferred targets of attacks. These attacks exploit weaknesses related to smart phones that can come from means of communication like SMS, MMS, wifi networks, and GSM. There are also attacks that exploit software vulnerabilities from both the web browser and operating system. Finally, there are forms of malicious software that rely on the weak knowledge of average users.

Different security counter-measures are being developed and applied to smart phones, from security in different layers of software to the dissemination of information to end users. There are good practices to be observed at all levels, from design to use, through the development of operating systems, software layers, and downloadable apps.

Articles

INTERNET

By— D. BRAHMESWARA RAO, IV CSE

Today we are in the Internet world and everyone prefers to enjoy fast access to the Internet. But due to multiple downloading, there is a chance that the system hangs up or slows down the performance that leads to the restarting of the entire process from the beginning. This is one of the serious problems that need the attention of the researchers. So we have taken this problem for our research and in this paper we are providing a layout for implementing our proposed Grid Model that can access the Internet very fast. By using our Grid we can easily download any number of files very fast depending on the number of systems employed in the Grid. We have used the concept of Grid Computing for this purpose.

The Grid formulated by us uses the standard Globus Architecture, which is the only Grid Architecture currently used world wide for developing the Grid. And we have proposed an algorithm for laying our Grid Model that we consider as a blueprint for further implementation. When practically implemented, our Grid provides the user to experience the streak of lightening over the Internet while downloading multiple files.

Key words:

Grid Security Interface (GSI), Global Access to Secondary Storage (GASS), Monitoring and Discovery Service (MDS), Globus Resource Allocation Manager (GRAM).

INTRODUCTION : What's Grid computing? Grid Computing is a technique in which the idle systems in the Network and their ― wasted ― CPU cycles can be efficiently used by uniting pools of servers, storage systems and networks into a single large virtual system for resource sharing dynamically at runtime. These systems can be distributed across the globe; they're heterogeneous (some PCs, some servers, maybe mainframes and supercomputers); somewhat autonomous (a Grid can potentially access resources in different organizations).

Although Grid computing is firmly ensconced in the realm of academic and research activities, more and more companies are starting to turn to it for solving hard-nosed, real-world problems.

IMPORTANCE OF GRID COMPUTING:

Grid computing is emerging as a viable technology that businesses can use to wring more profits and productivity out of IT resources -- and it's going to be up to you developers and administrators to understand Grid computing and put it to work.

It's really more about bringing a problem to the computer (or Grid) and getting a solution to that problem. Grid computing is flexible, secure, coordinated resource sharing among dynamic collections of individuals, institutions, and resources. Grid computing enables the virtualization of distributed computing resources such as processing, network bandwidth, and storage capacity to create a single system image, granting users and applications seamless access to vast IT capabilities. Just as an Internet user views a unified instance of content via the World Wide Web, a Grid user essentially sees a single, large, virtual computer.

Grid computing will give worldwide access to a network of distributed resources - CPU cycles, storage capacity, devices for input and output, services, whole applications, and more abstract elements like licenses and certificates.

For example, to solve a compute-intensive problem, the problem is split into multiple tasks that are distributed over local and remote systems, and the individual results are consolidated at the end. Viewed from another perspective, these systems are connected to one big computing Grid. The individual nodes can have different architectures, operating systems, and software versions. Some of the target systems can be clusters of nodes themselves or high performance servers.

TYPES OF GRID: The three primary types of grids and are summarized below:

 Computational Grid

A computational grid is focused on setting aside resources specifically for computing power. In this type of grid, most of the machines are high-performance servers.

☐ ☐ Scavenging grid

A scavenging grid is most commonly used with large numbers of desktop machines. Machines are scavenged for available CPU cycles and other resources..

☐ ☐ Data Grid

A data grid is responsible for housing and providing access to data across multiple organizations. Users are not concerned with where this data is located as long as they have access to the data.

DIET onnews

ఈనాడు విజయవాడ
ఆత్మీయ కలయిక

ఈనాడు విజయవాడ
సాఫ్ట్‌వేర్‌పై విద్యార్థులకు మెరుగైన శిక్షణ నివ్వాలి

సాక్షి కృష్ణాజిల్లా
చట్టాలపై అవగాహన ఉండాలి : సీవి

ఈనాడు విజయవాడ
కోలాహలంగా వార్షికోత్సవం

స్వచ్ఛ కంకిపాడులో బాలలు